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JOURNAL

OF THE

Royal Horticultural Society

EDITED BY

D. MORRIS, Esq., M.A., F.L.S., Treasurer;

AND

The Rev. W. WILKS, M.A., Secretary.

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OFFICES: 117 VICTORIA STREET, S.W.
GARDENS: CHISWICK.

Printed for the Royal Horticultural Society

BY

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ROYAL HORTICULTURAL SOCIETY.

THE Royal Horticultural Society was incorporated by Royal Charter in the year 1809, and as a **National Institution** for more than a **hundred years** it has devoted itself to the advancement of Horticulture in all its branches.

Its **Gardens** at Chiswick are devoted to useful and scientific experiments and trials connected with the growth and value of new and different varieties of **fruit, flowers, and vegetables**, as well as of other plants of garden value and interest. These Gardens, maintained at an annual cost of £1,500, afford to all lovers of Horticulture an opportunity of watching the most interesting **cultural experiments** carried on in this country.

The **Chiswick Gardens** are open daily (Sundays and holidays excepted) at 9 A.M., and close at sunset. During the **summer months** (*i.e.*, from May 1 to October 31) the Gardens are open on **Sundays** from 1 P.M. till sunset.

Floral Meetings are held in the Drill Hall of the London Scottish R.V., in James Street, Victoria Street, Westminster, on an average, bi-monthly, when Committees adjudicate on the merits of new introductions, and a short **Lecture** is given on some subject of general Horticultural interest.

A **Journal** of the Society is published, and forwarded to all subscribing Fellows, in which an account of the **Lectures** and **Meetings** is given, together with reports of **plant trials** at Chiswick. These **Journals** will be found full of most valuable information derived from actual experience. They are of very great interest to all **lovers of gardens** and amateurs no less than to skilled horticulturists.

The Society is entirely maintained by the subscriptions of its Fellows. Any lady or gentleman desirous of joining the Society and thus promote the **Practice** and **Science** of Horticulture in these Islands may obtain Nomination Forms and full particulars on application to the Secretary at the Society's Offices, 117 Victoria Street, S.W.

The general privileges of Fellows are as follows :

All Fellows are entitled to attend and to vote at all meetings, and, subject to the necessary regulations and hours, to personal admission to the Gardens, Exhibitions, &c., and to the use of the Society's Rooms and of the Libraries, at 117 Victoria Street; to a copy of the Society's Journal, and also to purchase fruit and vegetables grown at Chiswick, *at specially reduced rates.*

The special privileges of Fellows, varying according to the rate of subscription, are as follows :

Fellows subscribing £4. 4s. a year are entitled to a personal Fellow's Pass, and to a Family Ticket admitting five persons to Chiswick Gardens, and to all the Society's Exhibitions and Meetings at 12 o'clock, being an hour earlier than the general public.

Fellows subscribing £2. 2s. a year are entitled to a personal Fellow's Pass, and to a Transferable Ticket admitting two persons to all Exhibitions and Meetings at 12 o'clock; and admitting three persons to Chiswick Gardens on all ordinary days, including Sundays.

Fellows subscribing £1. 1s. a year are entitled to a personal Fellow's Pass for all Meetings and Exhibitions at 12 o'clock, which Pass may also be used to admit three persons to Chiswick Gardens on all ordinary days, including Sundays.

W. WILKS, *Secretary.*

JOURNAL
OF THE
ROYAL HORTICULTURAL SOCIETY.
VOL. X. 1888.

REPORT
OF THE
APPLE AND PEAR CONFERENCE
HELD IN THE
ROYAL HORTICULTURAL SOCIETY'S GARDENS AT CHISWICK
OCTOBER 16 to 20, 1888,

With which are combined certain STATISTICS obtained at the
SOCIETY'S APPLE CONGRESS held at CHISWICK in 1883.

NOTE: The statistical portion of this Report (Parts II. and III.) embraces Apples only, but it was not found possible in Part I.—the report of the actual Conference—to separate the portion relating to Pears only. It has, therefore, been thought better to publish the report of the Conference together with the statistics relating to Apples, and to let the statistics relating to Pears form a separate volume.

APPLE AND PEAR CONFERENCE.

PREFACE.

EVER since the holding of the first Apple Congress, at Chiswick, by the Royal Horticultural Society, in October 1883, an impression of the importance of Hardy Fruit Culture, both in gardens and also as an appanage to agriculture, has been steadily growing in the public mind, and there has been an increasing demand for information as to the best sorts to grow, the most skilful methods of culture, and the conditions under which a reasonable return may be looked for. In order to assist in the elucidation of these matters, and to correct up to the present date the Reports of the Society's Apple Congress, 1883, and Pear Conference, 1885, the Council of the Society decided to hold a Conference on Apples and Pears in their Gardens at Chiswick in 1888.

In the 1883 Congress it had been thought desirable to secure the representation of all the varieties of apples in cultivation, whether valuable or otherwise, so as to arrive by comparison at an estimate of their worth. But this having been once done, and the results duly recorded, it was not now considered necessary to go over the same ground again; it was only proposed therefore to invite the exhibition of such varieties as find favour, or may be considered thoroughly worthy of cultivation. And one object of the Conference being to illustrate by facts and examples the present state and future prospects of *commercial* fruit culture in this country, it was desired that contributors should endeavour, as far as possible, to furnish samples of fruits that are in favour in the markets of their several localities. All fruit growers, whether private gardeners or growers for market, were invited to exhibit, and it was pointed out in the schedules that the wider the area

from which the collections were procured the greater would be the value and interest of the exhibition.

It was requested that every collection of fruit should be accompanied with as much information as possible with regard to the soil, exposure, and physical conditions of the districts in which they had been grown. For this purpose the following form was enclosed, and the information so obtained has been incorporated in the body of this Report:—

Form sent out to be filled up by Exhibitors.

NATIONAL APPLE AND PEAR CONFERENCE, 1888.

APPLES.

1. Exhibitor's Name and Address.
2. Class or Classes for exhibition.
3. Selection of twenty-four varieties most suited for culture in the district, named in order of succession.
4. Selection of twelve varieties most suited for culture in the district, named in order of succession.
5. Selection of ten varieties suited for market culture, stating to what extent they are grown in the district.
6. Situation:—Sheltered or otherwise.
7. Character of soil, sub-soil, &c.
8. General remarks as to modes of cultivation, stocks, pruning, &c.

In order to carry out the objects of the Conference in various parts of the country, the following gentlemen were requested to act as a Committee, those marked with an asterisk forming the Executive:—

BAILLIE, E. T., Messrs. Dickson & Sons' Nurseries, Chester.	*CHEAL, J., The Nurseries, Crawley, Sussex.
BANNISTER, W., The Gardens, Cote House, Westbury-on-Trym.	*COLEMAN, W., The Gardens, East-nor Castle, Ledbury.
BARR, PETER, 12 King Street, Covent Garden, W.C.	CORNU, PHILIP LE, High View Nurseries, St. Heliers, Jersey.
*BEDDOME, COLONEL, Sispara, West Hill, Putney.	CRUMP, W., The Gardens, Madresfield Court, Great Malvern.
BLACKMORE, R. D., Teddington.	CRANSTON, JOHN, The Nurseries, Hereford.
BREEZE, G., The Gardens, Petworth Park, Petworth.	CROWLEY, PHILIP, Waddon House, Croydon.
*BUNYARD, GEORGE, The Nurseries, Maidstone.	CUMMINS, G. W., The Gardens, The Grange, Wallington.
BUNYARD, T., The Nursery, Ashford.	*DEAN, A., Bedfont, Hounslow.
BURNETT, J., The Gardens, The Deepdene, Dorking.	DENNING, W., Heathfield Nursery, Hampton.

- DICKSON, W. A., 108 Eastgate Street, Chester.
- *DOUGLAS, J., The Gardens, Great Gearies, Ilford.
- DUNN, M., The Gardens, Dalkeith Palace, N.B.
- FORD, S., The Gardens, Leonardslee, Horsham.
- GARLAND, J., The Gardens, Killerton, Exeter.
- GRAHAM, J., Cranford, Hounslow.
- HARRISON, J., The Nurseries, Leicester.
- *HAYCOCK, C., Goldings, Hertford.
- HAYWOOD, T. B., Woodhatch Lodge, Reigate.
- *HERBST, H., Kew Road, Richmond.
- *HIBBERD, S., 1 Priory Road, Kew Green, Kew.
- *HOGG, Dr. R., 171, Fleet Street.
- HOWE, C., Benham Park Gardens, Newbury.
- *HUDSON, J., The Gardens, Gunnersbury House, Acton.
- INGRAM, W., The Gardens, Belvoir Castle, Grantham.
- JEFFERIES, W. J., The Nurseries, Cirencester.
- JONES, T., Royal Gardens, Frogmore.
- *LANE, F. Q., The Nurseries, Great Berkhamstead.
- LEE, W., The Nurseries, Hammer-smith.
- LEE, J., 78, Warwick Gardens, W.
- MANSELL, Rev. J. L., Guernsey.
- MARSHALL, WILLIAM, Auchinraith, Bexley.
- MELVILLE, D., The Gardens, Elliston House, St. Boswell's, N.B.
- MILES, G. T., The Gardens, Wycombe Abbey, High Wycombe.
- *MONRO, G., Covent Garden.
- *MORRIS, D., Royal Gardens, Kew.
- MUIR, J., The Gardens, Margam Castle, Taibach, South Wales.
- NORMAN, G., Hatfield House Gardens, Hatfield.
- *PAUL, G., The Nurseries, Cheshunt.
- *PAUL, W., The Nurseries, Waltham Cross.
- *PEARSON, A. H., The Nurseries, Chilwell, Notts.
- POWNALL, M., Lenton, Nottingham.
- PRAGNELL, W. G., The Gardens, Sherborne Castle, Dorset.
- RENWICK, J., The Nurseries, Melrose, N.B.
- *RIVERS, T. F., The Nurseries, Sawbridgeworth.
- *ROBERTS, J., The Gardens, Gunnersbury Park, Acton.
- ROSS, C., The Gardens, Welford Park, Newbury.
- *RUST, J., The Gardens, Eridge Castle, Tunbridge Wells.
- SALTMARSH, T. J., The Nurseries, Chelmsford.
- SAUNDERS, C. B., The Nurseries, St. Saviour's, Jersey.
- SHINGLES, T., The Gardens, Tortworth Court, Gloucester.
- SCLATER, C. G., Fruit Grower, Heavitree, Exeter.
- *SMITH, J., The Gardens, Mentmore, Leighton Buzzard.
- SMITH, R., The Nurseries, Worcester.
- SMITH, C., Caledonia Nurseries, Guernsey.
- STRICKLAND, Sir C. W., Bart., Hildenley, Malton.
- SUTTON, ARTHUR W., Reading.
- THOMAS, O., The Gardens, Chatsworth, Chesterfield.
- THOMSON, W., The Vineyard, Clovenfords, Galashiels, N.B.
- *TURNER, A., Royal Nurseries, Slough.
- *VEITCH, H. J., Royal Exotic Nurseries, Chelsea, S.W.
- VEITCH, P., The Nurseries, Exeter.
- *WALKER, J., Whitton, Middlesex.
- WARDEN, C., The Gardens, Clarendon Park, Salisbury.
- WARREN, W., Worton Gardens, Isleworth.
- WATKINS, J., Pomona Farm, Withington, Hereford.
- *WEBBER, J., Covent Garden, W.C.
- WEBSTER, J., The Gardens, Gordon Castle, Fochabers, N.B.
- WEIR, HARRISON, Sevenoaks.
- WHEELER, A. C., The Nurseries, Gloucester.
- *WILDSMITH, W., The Gardens, Heckfield Place, Winchfield.
- *WILKS, Rev. W., Shirley Vicarage, Croydon.
- WILLARD, JESSE, Holly Lodge Gardens, Highgate, N.
- *WRIGHT, JOHN, 171 Fleet Street, E.C.
- BARRON, A. F., R.H.S. Gardens, Chiswick, *Secretary*.

Although the season 1888 was not by any means a favourable one—the crops of fruit throughout the country being in general considerably below the average—the exhibition at the Conference was nevertheless one of great merit, and proved a decided success both as regards the quantity and the quality of the fruit. Seventy-three of the most prominent fruit-growers, both among amateurs, market-gardeners, and nurserymen, took part in the exhibition; and the number of dishes of apples staged amounted to 2,690, filling the large conservatory and the greater portion of a tent on the lawn.

The Committee, being divided into sections, made a careful examination of the different exhibits, and corrected any errors of nomenclature that were observed. The general correctness in this respect was especially noticeable, and as being, to a great extent, the result of the Society's labours in the 1883 Congress, this was extremely gratifying. Special Certificates were also awarded by the Committee to the most noteworthy examples of culture selected from the whole of the exhibits. A list of these awards will be found in the body of the Report.

Of necessity the varieties staged by the exhibitors in the various classes were, in many instances, repetitions one of another, but it has not been considered necessary in this Report to enumerate these repetitions.

An audit of the varieties exhibited places Warner's King at the top of the list—78 dishes of this variety having been staged as against Blenheim orange 74, and King of the Pippins 71. The total number of distinct varieties exhibited amounted to 1,496. Of the newer varieties which seem to be steadily advancing in public favour may be named Prince Bismarck, The Queen, Bramley's Seedling, Lane's Prince Albert, Annie Elizabeth, Gascoigne's Seedling, Lady Henniker, and Peasgood's Nonesuch.

The Report of the 1883 Congress, entitled "British Apples," prepared by Mr. A. F. Barron, having been for some time out of print, and many of the most valuable statistics that it contained having been incorporated with the present Report, it may be well to point out that that Congress owed its origin to the unusually abundant crop of all sorts of Apples in the year 1883. So large was the crop and so fine the fruit that it attracted attention on all sides, and it was at once recognised by the R. H. S. to be an opportunity which should not be lost for correcting any mistakes in the names, &c., of the large and important standard collection of Apples in the Society's Gardens at Chiswick. At the same time it was felt that if, for the purpose of such verification and comparison, examples of fruit could be gathered together from all parts of the country and be exhibited publicly, the occasion might be made one of the greatest value and interest to all Apple growers in the United Kingdom.

To develop and carry out this idea the Council of the Society appointed a large and representative General Committee of fruit-growers, consisting of the following gentlemen; those marked * forming the Executive Committee at Chiswick, of which Mr. John Lee was the Chairman:—

COMMITTEE OF 1883.

- | | |
|---|--|
| BLACKMORE, R. D., Teddington. | LAXTON, T., Bedford. |
| BRITCHER, G., Tonbridge. | LEE, CHAS., & SON, The Nurseries,
Hammersmith. |
| BROTHERTON, R. P., Tynningham. | *LEE, JOHN, 78 Warwick Gardens,
S.W. |
| BUNYARD & Co., Nurseries, Maidstone. | MILES, G. T., The Gardens, Wycombe Abbey, High Wycombe. |
| BURNETT, J., The Gardens, The Deepdene, Dorking. | ORMISTON & RENWICK, Nurserymen,
Melrose. |
| CHEAL & SONS, Nurserymen, Crawley, Sussex. | PEARSON, J. R., The Nurseries,
Chilwell, Notts. |
| CRANSTON & Co., Nurserymen, Hereford. | PAUL & SON, The Nurseries, Cheshunt. |
| DANCER, F. N., Little Sutton, Chiswick. | PAUL, WM., & SON, The Nurseries,
Waltham Cross. |
| DICKSON, F. & A., 106 Eastgate Street, Chester. | POYNTER, ROBERT, Nurseryman,
Taunton. |
| DICKSON, JAMES, 108 Eastgate Street, Chester. | RIVERS & SON, The Nurseries, Sawbridgeworth. |
| DICKSON A. & SONS, Newtownwards, Belfast. | *ROBERTS, J., The Gardens, Gunnersbury Park, Acton. |
| DUNN, M., The Gardens, Dalkeith Palace, N.B. | ROSS, CHARLES, The Gardens, Welford Park, Newbury. |
| FISHER, SON, & SIBRAY, Nurserymen, Sheffield. | RUTLAND, F., The Gardens, Goodwood, Chichester. |
| GARLAND, JOHN, The Gardens, Kilmington, Exeter. | SALTMARSH & SONS, The Nurseries,
Chelmsford. |
| GILBERT, R., The Gardens, Burghley, Stamford. | SHINGLES, THOMAS, The Gardens,
Tortworth Court, Gloucester. |
| GOLDSMITH, G., The Gardens, Holmlanden, Tonbridge. | SMITH, JAMES, The Gardens, Mentmore, Leighton Buzzard. |
| GRAHAM, JOHN, Cranford, Hounslow. | SMITH, R., & SONS, The Nurseries,
Worcester. |
| GRIEVE, PETER, Bury St. Edmunds. | STEVENS, Z., The Gardens, Trentham, Stoke-on-Trent. |
| HARRISON & SONS, Nurserymen, Leicester. | STRICKLAND, SIR CHARLES, Bart.,
Hildenley, Malton, Yorkshire. |
| HAYCOCK, CHAS., The Gardens, Barham Court, Maidstone. | TURNER, CHARLES, Slough. |
| HIBBERD, SHIRLEY, Brownwood Park, Stoke Newington. | VEITCH & SONS, Nurserymen,
Chelsea. |
| *HOGG, Dr. ROBERT, 171 Fleet Street, E.C. | WHEELER & SON, Nurserymen,
Gloucester. |
| JEFFERIES, JOHN & SONS, Nurserymen, Cirencester. | *WOODBRIDGE, JOHN, The Gardens,
Sion House, Brentford. |
| JEFFERIES & SONS, Nurserymen, Oxford. | |
| JONES, T., The Royal Gardens, Frogmore. | |
| *KILLICK, LEWIS A., Langley, Maidstone. | |
| LANE, H., & SON, Nurserymen, Berkhamstead. | |

Secretary: A. F. BARRON, Royal Horticultural Gardens, Chiswick.

This Committee at once drew up and circulated a letter stating the objects of the proposed Apple Congress, and inviting co-operation from all fruit growers in the United Kingdom, and the response to this invitation far exceeded the most sanguine anticipations of the Council, promises of support and consignments of fruit being received from all parts of the country, completely filling the great conservatory, as well as several other of the houses in the Gardens. The following figures will show the extent of the interest displayed :—

Number of Exhibitors	236
Number of Dishes, or separate lots of Apples ...	10,150

In the arrangement of the various collections received, the different counties and districts were grouped together, so far as possible, thus illustrating to some extent the general character of the produce of different parts of the country, and forming some indication of the varieties most suited to different localities.

Kent contributed the greatest number of dishes, viz., 913, Middlesex being second with 908.

The following form was also sent out by the Committee :—

“NATIONAL APPLE CONGRESS, 1883.

“FORM TO BE FILLED UP BY EXHIBITOR.

“ Name of Exhibitor ... ..	...
Number of sorts exhibited ... ..	...
Situation where grown, sheltered or otherwise ... ..	...
Character of soil, sub-soil, &c. ... ..	...
Stocks on which grafted ... ..	...
Character or form of trees, Standard, Bush; age... ..	...
Best Culinary sorts suited to district, not exceeding twelve	
Best Dessert sorts suited to district, not exceeding twelve	
General remarks” ... ..	...

Upon the returns thus obtained the Report of 1883 was chiefly based.

The Committee met on several occasions during the Congress, and, working in sections, made careful examination of the exhibits, with a view to the correction of nomenclature, &c., which corrections were in each case forwarded to the exhibitor.

The number of different names applied to the Apples exhibited, including synonyms, amounted to 2,020, and the number of varieties described as presumably distinct to 1,445.

In drawing up the Report of 1883 it was found desirable to form separate groups or divisions of the different districts of the country, corresponding to the arrangement of the exhibits at the Congress. For example, *Group I.* The SOUTHERN COUNTIES, comprising Berks, Hants, Kent, Middlesex, Surrey, Sussex,

and Wilts, which, being subject to similar climatic influences, readily afford means of comparison.

From the selections of the varieties of Apples made by the exhibitors, as best suited to their respective localities, three valuable tables were compiled, which have been re-inserted in this present Report, viz. :

1. Poll taken of the selections for each county.
2. Poll taken of the selections for each division, or group of counties.
3. Poll of the selections for the whole of Great Britain.

A distinctive feature of the 1888 Conference, which was absent from the 1883 Congress, and which makes the present Report peculiarly valuable, was the reading of papers relating to Hardy Fruit Culture, and the discussions following thereon. This part of the Report (Part I.) has been prepared for the press by the Secretary of the Society, the Rev. W. Wilks, and Parts II. and III., the statistical and descriptive portions, are the work of Mr. A. F. Barron, Superintendent of the Society's Gardens at Chiswick.

APPLES.

PART I.

Consisting of the Papers read and a Report of the Discussions which took place at the Apple and Pear Conference, held in the Royal Horticultural Society's Gardens at Chiswick, October 16 to 20, 1888.

APPLE AND PEAR CONFERENCE, 1888.

The Conference, which was held in the Great Vinery of the Society's Gardens at Chiswick, was opened on Tuesday, October 16, 1888. The proceedings commenced at 3 P.M. with an address from Sir TREVOR LAWRENCE, Bart., M.P., President of the Society, who spoke as follows :—

It is my duty, and I think it is a most agreeable duty, having the honour of holding the office of President of the Royal Horticultural Society, to make a few—and I promise they shall be very few—introductory remarks in opening the exhibition of this very extensive collection of fruit. I should desire in the first place to disclaim in the strongest possible way any pretension whatever to be entitled to express an opinion on the subject of fruit cultivation myself. At the same time a very large amount of interest is being at the present moment brought to bear upon the question of fruit cultivation, I believe in some measure due to the observations that have been made by gentlemen occupying positions in the political world, very often somewhat at a loss for a subject. I think I may venture to remind you that an address of some considerable length was delivered lately at Hawarden by Mr. Gladstone, but I am not quite sure that those persons who read the accounts of the ladies who kept thirty or forty chickens and made £5 per annum out of them, or of the persons who made £40 from 1 acre of Strawberries, will not be disappointed if they expect to repeat so remarkable a success. It is a matter of importance in dealing with this subject that we shall not pitch our anticipations too high, and it should not be supposed that in extending, as reasonably as may be extended, the cultivation of hardy fruit, any real panacea for the troubles which have been afflicting the agricultural classes of this country

will be found. The utmost that can be done will be to give the agricultural classes some help where intelligence and skill are brought to bear. As long as we continue to import such large quantities of fruits and vegetables as we do—between six and seven millions in value annually—that fact will be pointed to as indicating a direction in which more may be done in this country; but it must not be forgotten that the total includes some fruits that cannot be cultivated in this country, and it is a further matter for consideration that it is by no means clear at the present moment that where hardy fruits such as Pears and Apples can be successfully cultivated, that can be done to bring in anything like a satisfactory profit. Since I have been in the gardens of the Royal Horticultural Society I have asked two authorities what they thought on that subject. One gentleman, who is a most successful cultivator of fruit, told me that with all the care and intelligence which could be brought to bear in the cultivation of Apples and Pears, the profit to be made would not perhaps be more than 6*d.* a sieve. If it be so, it is not a very good profit. The other gentleman said he was quite certain that for all the hardy fruit that could be grown in this country a good market could be found. I trust the latter is the correct view. The present Conference has a different object from those of 1883 and 1885. On the previous occasions an attempt was made to collect every description of known Apple with the view, to a certain extent, of eliminating those varieties that were of little value for purposes of cultivation. And that was also the case with Pears. The present Conference proposes to invite the exhibition of such varieties only as find favour, or may be considered thoroughly worthy of cultivation; and one object of this Conference is to illustrate by facts and examples the present state and future prospects of commercial fruit culture in this country. I venture to think that our object is a thoroughly practical one, and when you pass through this conservatory, and the tents which are adjuncts to it, you will see that, having regard to the exceedingly unfortunate season which we have passed, the exhibition made by the leading fruit growers of the country is one which is eminently satisfactory. It appears to me that what the Conference can most wisely do, and that which the papers to be read promise to do, is to draw attention to the varieties which can best be cultivated, both of Apples and Pears, throughout the country, having regard to the various conditions of climate and soil. Having read the programme for the week, which had been published, and remarked that the Chairmen for the three last days of the Conference were all excellent men, who would bring additional light to bear on the subjects of discussion, Sir Trevor went on to say:—One matter of importance has been dealt with by the House of Commons, and that is the question of railway charges for carriage. As Mr.

Gladstone justly pointed out in justification of the preferential rates that they have been charging, it was owing to the fact that in dealing with the foreign producer they dealt with a trainful of baskets or hampers, whereas when they came to deal with the local producer, they had to collect the fruit, which puts them to considerable expense. At the same time I think the Legislature has acted perfectly right in deciding that these preferential rates shall be considered and revised by the Board of Trade, for, as we all of us are sometimes painfully aware, the railway companies have had given to them a monopoly of the means of transport of this country. I have observed in the newspapers that as a result of one of the Conferences that have lately taken place, some attacks have been made on those who devote themselves to the calling of nurserymen. We are told that nurserymen keep large quantities of worthless varieties of Apples and Pears. I have no doubt that this is the case, but what I should think would be ground for blaming them would be if they represented those worthless varieties as good varieties. I have not the least doubt that there is no gentleman connected with the trade who, if I were to get him to recommend me the very best variety for my soil, would not honestly and judiciously recommend the best varieties. There are persons who desire to make experiments for themselves, and they will not be satisfied that such and such varieties are worthless unless they have tried them themselves. I cultivate a good many Orchids, some of which are considered by my friends to be worthless varieties. At the same time I always cultivate them, and when I go to other gentlemen to purchase them, I should not like to be told that they were worthless. It is really a matter of trade, and I think the attacks which have been made are ungenerous and uncalled for. I am quite certain that with regard to the cultivation of hardy fruit exactly the same conditions are necessary for success as with every other description of gardening, that is to say, you must display skill, care, and intelligence, and I think you will find that has a good deal more to do with the result than climate. I remember at the Conferences which took place in 1883 and 1885 a good many of the best exhibits came from the North of Scotland, where the climate is represented to us who live in the South as somewhat severe. However that may be, we have got to make the best we can of our climate, and taking one year with another I think on the whole it is a very good climate, and if we do not succeed, we shall be wiser if we place the fault on our own shoulders than on the shoulders of the climate. I do not think I can add anything else, except to say that the Royal Horticultural Society is extremely indebted to the very large number of persons who have contributed to this show. It is a most satisfactory and numerous one, and one which is most creditable to the exhibitors. The Society has been most

anxious to do all it could to promote the undertaking, and it hopes to do something to lead the public in wisely making use of the feeling which exists at present in favour of the cultivation of hardy fruits. I trust the Conference will bear good fruit both practically and figuratively.

Mr. SHIRLEY HIBBERD moved a hearty vote of thanks to the Council for inaugurating the exhibition. It had been attended with considerable difficulty, but up to the present everything seemed to have passed off smoothly, and he congratulated them on the success attained. While they had been organising this exhibition other persons had been busy in the same kind of work, and those persons appeared to him sometimes to be freer in their mode of operation. This Society appeared to be more fettered—it might be to their advantage—but he had no confidence in any of the associations which had been started lately, and he thought the Royal Horticultural Society rendered them unnecessary. Political, economical, and commercial questions were involved in the question of fruit culture, but this Society was content for the present to determine the merits of varieties. This Society should be the last to convert itself into a political agency. They did not want that; but he thought their Fruit Committee should have their powers extended to deal with such things as market tolls, the conveyance by railway, and other difficulties which stood in the way of the seller.

Mr. CHEAL seconded the motion, and expressed his gratification that the Council had stepped forward at this moment to place before the country in a practical form what ought to be done, and the best way of doing it.

The CHAIRMAN, on behalf of the Council, returned thanks for the vote, and added that the Council were most anxious to give all assistance to growers in all branches of horticulture. As to whether the questions referred to were within the province of the Society, it was a matter about which opinions might differ. He was one of those persons who believed that the more the cobbler kept to his last, the better he was likely to do his work. The questions were important to the subject of fruit growing, but they wanted to give every assistance to persons who devoted themselves to the cultivation of hardy fruit—that was clearly within their province. One great advantage of the Conference was that it showed that the collections were more accurately named than was the case in either 1883 or 1885, which proved that the people understood their business a good deal better now than then.

WEDNESDAY, OCTOBER 17.

The chair was taken at 1.30 p.m. by Dr. HOGG, F.L.S., F.R.H.S., who remarked that for some time past they had been treated to the observations of the theorist and *doctrinaire* as to what was the best way of developing fruit culture in this country, but they had now come to the practical part of the subject, from which he had no doubt great good would result. He would now call on the reader of the first paper.

APPLES FOR PROFIT.

By Mr. GEORGE BUNYARD, F.R.H.S., Maidstone.

The commercial growth of apples for market is frequently entered upon in a wrong manner, because many start on the enterprise without sound information. Beginners fight shy of the growers of trees for sale under the unfair notion that they would recommend those kinds of which they held a stock; they then procure the "tip" from the salesmen in the various markets, who, as far as they can (and in good faith), give them the names of the kinds that sell well—fruits, so to speak, which dispose of themselves by their names or appearance. Many of the choicest apples produce but a small crop, or are so long in coming to a state of profitable production, that planters get discouraged; others are recommended which are very slow growers, or rarely make good orchard trees, and thus land is not fully utilised. As the markets are supplied from a large area the salesmen have but a general idea of the suitability of sorts to a district, and hence much valuable time is lost. In the short time at my disposal I propose to give a few hints as to the formation of a *profitable Apple orchard*, or plantation, where the return shall be speedy, and yet in the future for a century shall yield a good result. The first operation is the procuring of suitable land. In a district where little fruit is grown an idea can be gained from the growth of the few fruit trees in the cottage gardens, and perhaps the orchards near gentlemen's seats. If the apples show a kindly and clean growth, with an absence of lichens and canker, and if elm trees flourish, it will so far be favourable. Exposure to prevailing winds is to be avoided, either by shelter planting, or, better still, by taking advantage of existing woods or hedges, and a slope to the south or west is to be preferred; but, in order to secure a permanent orchard, care must be taken to get deeply cultivated, or rich deep soil, or a

few years of fertility will only be the precursor of decay and disappointment.

Having settled on suitable land, the tenant or purchaser next proceeds to put the land in order for planting, either by steam cultivation or by thorough digging or trenching—the latter, though expensive at the start, is of permanent benefit. This operation is best done before the frosts set in, that the land may be purified and sweetened by exposure. The ground should then be set out, and standard trees, on the crab or free stock, of the following sorts, planted 24 ft. apart, requiring 75 to an acre.

APPLES FOR STANDARD ON WARM LOAMY SOILS.*

1. Dessert Apples ; to pick and sell from the tree :

August.

Devonshire Quarrenden.

Sugar-loaf Pippin.

September.

Lady Sudeley.

Yellow Ingestrie.

2. To store ; October to Christmas :

King of the Pippins.

Mabbot's Pearmain.

Cox's Orange.

Blenheim Orange.

3. Kitchen Apples ; to sell from the tree ; August and September :

Early Julien.

Keswick Codlin.

Lord Suffield.

Duchess of Oldenburg.

Counsellor.

Grenadier (true).

Ecklinville.

4. To store ; October to December :

Warner's King.

Schoolmaster.

Lord Derby.

Golden Noble.

Tower of Glamis.

Waltham Abbey.

5. To keep from January to May :

Wellington.

Winter Queening.

Norfolk Beaufin.

Lady Henniker.

Bramley's Seedling.

Annie Elizabeth.

If the soil is cold, but rich, omit Lord Suffield and add Lord Grosvenor, and omit Cox's Orange and King of Pippins.

So far for the top crop, the space between being utilised by placing three two or three year old dwarf trees between each standard, others at six feet apart, which, less 75 for standards, will be 1,135 per acre, until the plantation is filled up. These dwarfs will produce the best fruit from trees on the Paradise or surface rooting stock, and may consist of the following :

APPLES FOR BUSH OR FREE PYRAMIDAL STYLE TO BE GROWN ON PARADISE STOCKS.

6. Dessert kinds ; to sell from the tree.

* The list of fruits given is more extended than is advisable, but it may only be possible to obtain a part of the sorts given in the planters' locality ; the fewer kinds used the better

Early :

Gladstone.

Red Juneating.

September.

Colonel Vaughan.

Duchess of Oldenburg.

Duchess's Favourite.

Yellow Ingestrie.

Worcester Pearmain.

7. To store for sale October to February :

Cox's Orange.

Gascoigne's Scarlet.

Cox's Pomona.

Beauty of Kent.

Peasgood's Nonesuch.

Baumann's Reinette.

If the soil is cold, omit Cox's Orange and Worcester Pearmain, and if very rich and good warm land, add Adams' and Hubbard's Pearmain, Ross, Nonpareil, and Gipsy King; while for very late keeping Golden Knob, Sturmer, and the smaller fruit of Dutch Mignonne are useful.

8. Kitchen Apples of large size to sell from the tree (on Dwarfs) :

Lord Grosvenor.

The Queen.

Ecklinville.

Small's Admirable.

Manks' Codlin.

Grenadier.

Golden Spire.

Counsellor.

Pott's Seedling.

Stone's.

Stirling Castle.

9. Fine Kitchen Apples to store (on Dwarfs) :

Lord Derby.

Bismarck.

Murfitt's Seedling.

Winter Peach.

Lane's Prince Albert.

Dutch Mignonne.

In six years' time the trees immediately beneath the standards can be transferred to other land, and will, if removed with care (in October or early in November), suffer little from lifting, and in the second year will produce heavy crops. After the sixth season the orchard should be left with a permanent crop of dwarf apples, and standards at 12ft. apart. The dwarfs at some future time could be cut away, and the standards, which would then be established and strong, should be laid to grass, and thus fodder for sheep and a top crop of apples could be secured annually. Until the six-foot trees cover the land, potatoes may be grown between the rows, or lily of the valley, or daffodils. But if land is cheap, the space may remain without crop, and the roots will benefit greatly from the run of all the land. Weeds must be kept down, and if standards only are planted no corn crop must be taken, but in this case soft fruit may be placed between them. The plantation should be dug in December or January each year, and be knocked over with a prong hoe in March.

Oxen and horses should not be allowed in young orchards. Shelter can be quickly obtained by planting Damsons or Bush plums (the latter a Kent sort), with Crawford or Hessel Pears as an inner line at 12 ft. apart, and this screen would pay its way.

If desired, plums could be placed between the apple standards, or gooseberries and currants, omitting the dwarf apples. If the land is properly prepared the apples should need no manure for some years, as the use of stimulants while the trees are young is prejudicial by inducing a sappy unripened growth which lays the tree open to damage by frost. When the trees are carrying a heavy crop, mulching may be carried out in June, or liquid manure can be used with advantage in the growing time. Such a plantation as described would commence to bring a return from the dwarfs in two years, and the fruit, with a little care in thinning, would command a ready sale, because, when grown in this manner, it is cleaner in appearance and much larger in size. In three or four years the standards would commence to fruit, and a much larger return would annually be made, and if properly managed, at the end of fourteen years the crop would buy the fee simple of the land outright.

In order to make the highest price, all fruits should be "graded," as the Americans say, and be of an even sample throughout; be properly named, and packed carefully, so that the baskets open clean and bright at the market. In the case of choice dessert kinds it would probably pay to pack them in light card boxes, such as those introduced by Mr. Tallerman for cherries, &c., and manufactured by Messrs. Johnson. In fact, we should take example from the French, and put our produce up in an attractive form. The pruning of the apples in February or March is of the simplest; no apples should be pruned the first year of planting. For the first two years commence to form the standard trees by taking out all the inner wood to obtain a bowl shape, and cut back the young growth to four or six eyes, to a bud pointing outward; the fourth or fifth year shorten the wood of the current year to six or twelve inches, and keep the centres clear, and after that time let them grow as they like, merely shortening the tips to procure an evenly balanced head, and taking out any crossing pieces of growth. The dwarfs can be cut in to form pyramids or basins, as desired, for two years, and after that be allowed to grow freely. Other matters, such as securing the limbs in a heavy crop, and staking the standards, will have to be attended to, and the stakes must be removed from the standards in the winter as soon as the trees can do without support, as the ties are apt to cut into the bark and produce canker.

For apple growing, land need not be contiguous to a railway station, as they will travel well if carefully packed. Storing enables a grower to realise a high price at a time when good apples are scarce; where proper stores, such as the hop oasts of Kent, do not exist, a frost-proof shed will do, and if care is taken to store all sound fruit, a thick covering of straw will effectually exclude frost, and keep the fruit plump and heavy. If 1,100 trees bore half a gallon each, at three years old the crop would be about 70

bushels per acre, which, at 4s. nett (carriage and salesman's charges deducted), would give a return of £14 per acre; at five years one gallon each would double the produce, and so on. When the top and bottom crop come to pick, an average of half a bushel per tree would give a return of about £120 per acre. The risk of loss by wind is small with dwarf trees, and the cost of picking is less than in tall trees, and they can be readily thinned and attended to.

A word as to old existing orchards. My motto is—Woodman, spare that tree. If such old trees are well manured, in two years they would be either producing good fruit, or, if cider apples, they would so benefit from the improved culture that they should pay for re-grafting with superior kinds. I believe much may be done in this way, as the roots soon respond to generous treatment, and the foundation of success rests upon them. Suitable kinds for grafting on old trees would be—Stone's, Lane's Prince Albert, Small's Admirable, the new and splendid Bismarck, or the smaller Dessert Apples, such as Duchess's Favourite and Yellow Ingestrie.

DISCUSSION.

Mr. LE MAITRE asked whether he should prune back every year, or let the tree grow in its own fashion?

Mr. SHIRLEY HIBBERD asked whether Mr. Bunyard recommended The Queen as a market apple?

Mr. WRIGHT questioned Mr. Bunyard's dictum that no apple should be pruned the first year. He had always held it to be most important to preserve the balance of roots and branches. If, therefore, you dig up a tree you spoil this balance for a time, and very frequently, if the tree be not pruned, it will develop flower buds on the points of the shoots, and if these are left to bear fruit the tree will often be ruined for life. He, therefore, thought it best to prune after planting. If you dig up a rose and replant without pruning you get certainly no good growth, and perhaps a few miserable flowers. Therefore he asked whether, instead of letting it go forth as a dogma never to prune the first year, it would not be better to say "Prune lightly, and always back to a wood bud pointing outwards."

Mr. BUNYARD said he had every faith in The Queen becoming a very marketable apple. It had one objection—that of being flat—and he knew market people had a preference for conical apples. It was, however, extremely beautiful and fertile, which placed it in the first rank. As to pruning pyramids, the remarks which applied to standard trees after the second and third year were also intended to apply to dwarf trees. It would be necessary to preserve the dwarf trees by pruning, and it must be left to the judgment of the grower and the state of his soil as to whether he pruned in four or five years or not. In Kent it

was the custom to prune very hard indeed, and he thought it was carried too far. He was of opinion that they might allow Nature to have her own way more. A tree placed in the hands of a thoroughly competent man might no doubt sometimes be advantageously pruned the first year, but in a paper like this one must speak generally, and he had often seen whole orchards ruined by inconsiderate pruning. As a general rule no apples should be touched with the knife the first year. Plums may be pruned, but not apples and pears. Root pruning is a very different matter, and he would always, when he had dug up a tree, prune its roots but not its top.

Mr. ROUPELL suggested that the moving of trees occasionally throws them into bearing, and so obviates the need of pruning.

Mr. BUNYARD replied that removing was practically the same as root pruning, because you get a full view of all roots, and no one would ever dream of replanting without a careful look over the roots and shortening the strong ones.

Mr. SHIRLEY HIBBERD: I object *in toto* to removal being the equivalent of root pruning. Lifting with care may bring trees into bearing, but root pruning as it is generally practised is a most cruel and barbarous proceeding.

Mr. PEARSON: I venture to take exception to Counsellor, sometimes called New Northern Greening, and sometimes Yorkshire Beauty, as a good market sort, as it is not, in my county at least, to be depended on for a good crop. It often looks well, and you think you are going to have a fine crop, but when you come to gather it, you find that the under branches have died, and the yield is thin. I should like to add Improved Northern Greening as being one of the most profitable apples we have for Nottinghamshire. In grafting on old worthless apple trees it is very important to use grafts of very free-growing sorts, *e.g.*, Duchess of Oldenburg, otherwise the experiment will prove a failure. Old pears will stand regrafting well, but apples are somewhat impatient of the process. I thoroughly agree as to the importance of storing. Many growers lose quite half their profit by not storing. We find late apples will keep very well in any old rooms, and even if they should get frozen, they recover if only they be left alone till a thaw comes.

Mr. J. WOOD: I should like to support Counsellor as a thoroughly good market apple. I grow seven acres of it in Kent, and do not know anything better; I would plant seven more if I had the land.

Mr. BUNYARD: I used not to believe so highly in Counsellor, but I soon found there was a large market demand for it; the planters would have it, and I fancy that is a pretty good proof of an apple's market value. Improved Northern Greening is an apple I entirely believe in as having a great future, but I felt bound in my paper only to speak from my own experience, and

as yet I have not known Improved Northern Greening long enough to warrant my giving it a character. Stone's is, in my opinion, a very reliable apple, and very valuable. I have known it fetch 6s. to 8s. a bushel.

FRUIT CULTURE FOR PROFIT IN THE OPEN AIR IN ENGLAND.

By Mr. WILLIAM PAUL, F.L.S., F.R.H.S., Waltham Cross.

I think I may safely assume that a much larger quantity of English fruit would meet with a ready sale if put before the public in a tempting state. I think I may also assume that there are thousands of acres of land in Great Britain at present, bringing little or no profit to owners or occupiers, which, if planted with fruit trees, might be made to return a good profit to both. Not that I think large fortunes are to be made by the venture, but a fair remuneration for the outlay of capital and the application of industry and skill.

To give these opinions a practical application, I propose to say a few words on the subject under the following heads :—

1. Climate.

3. Holdings.

2. Soils.

4. Sorts.

1. CLIMATE.—A mild, equable climate, free from sudden changes of temperature, and storms of wind or rain, should be preferred. I do not believe in planting apples, pears, cherries, and plums in the bottom of valleys. This is often done on account of the quality of the soil. But it is of little benefit to the grower to realise a good growth and abundant flowering if his crop is destroyed in the flowering state by the spring frosts. During the last few years there has been a wonderful show of blossom on the fruit trees in the Valley of the Lea, but little fruit has followed owing to the destruction of the embryo by the severity of the spring frosts in this low situation. This is the one point in climate that would seem to render it unsuitable for culture for profit, as it can be but partially amended by shelter or any other means.

It seems to me that many important points desirable to secure success, which are well known to those who are thoroughly versed in these matters, have not yet taken hold of the general mind, and they cannot be too often repeated till they do this. Only a few years ago I was surprised to meet with an orchard newly planted in the bottom of a moist valley, the climate of which in spring was trying in the extreme for early buds and blossoms. The sorts, too, were indifferently chosen. Neverthe-

less the planter persevered with their culture, until he found that for three or four years in succession he got plenty of blossom but little or no fruit. He has recently destroyed them and cropped the ground with vegetables. But what a waste of time and money, and what a source of vexation and disappointment!

I believe in planting on slopes or uplands, where the spring frosts are less destructive, with distant shelter to be provided, if not already existing. If cheap quick-growing trees are planted for shelter within a few yards of the boundaries of the plantations, at the time young fruit trees are planted, the former will afford the necessary shelter by the time the fruit trees come into bearing. I would emphasise to the utmost of my power the necessity of a favourable climate and shelter.

On a farm of 200 acres there may be a difference of climate that would render fruit culture profitable or unprofitable, according to the position in which the trees are planted. In the Valley of the Lea I find that in some years the crop is mainly or wholly on the bottom, and in others on the top of the trees. This I attribute to the frost being more severe in the one case near the ground, and in the other at a greater elevation during the period of flowering.

2. SOILS.—A light or medium loam of good depth and well drained is generally accepted as the most favourable for the production of an abundance of good fruit. It matters not if it be poor, provided manure can be obtained at an easy distance or at a cheap rate. A bad soil in a good climate often yields the grower more profitable results than a good soil in a bad climate. If the ground be wet, thorough and deep drainage is an essential condition of land to be employed in fruit culture, for it improves the climate as well as the soil. Chalk or gravel would seem to be a better subsoil than clay, as the latter, especially if wet, favours the development of canker.

As to the soils for the different fruits I would prefer for apples a medium loam; for plums, pears, and cherries a light warm loam. For strawberries, a light rich loam, cool and moist, with ready access to water. For raspberries, a deep, light loam, also cool and moist. For gooseberries and currants, a deep, strong loam. But I would not convey the impression that these soils are *necessary*; in well-drained soils cultivation may be safely extended even to strong or clayey loams.

Of course, the working of the soil is, or should be, much more costly than in ordinary farm operations, and the cultivation of the trees by pruning and keeping free from insects is also an item of cost in labour which must not be lost sight of. In estimates of profits lately put forward, it appears to me that these facts in connection with the cultivation of trees and soil have not been sufficiently allowed for. The practice of "sticking in" a few trees, by which is often meant merely digging a hole large enough and deep enough to admit and cover the roots, in

the way one would stick in a post, cannot be too loudly condemned. However good the soil, however careful the after culture, no satisfactory results can follow. The soil should be well prepared, and the trees carefully planted and cultivated according to the recognised methods of intelligent and experienced horticulturists.

3. HOLDINGS.—It is often said one should not plant fruit trees for profit except on his own land. But this would unnecessarily limit the number of growers. A long lease, however, is indispensable. According to the calculations I have made, but with which I need not trouble you, thirty years is the shortest lease I should advise anyone to plant under. If the lease be for a shorter period, I think the tenant should expect from the landlord either a renewal at the same rent as before, or that his trees be taken at a valuation, or some equitable arrangement made for compensation if the lease is not renewed.

It may be thought by some that this is asking too much from the owner of the soil, but I do not think it is more than it is his interest to give. By such concession he may secure a good tenant and a good rent, and there is ample security for his rent in the value of the trees on the soil. I will read a brief extract from a recent number of the *Sussex Advertiser* in reference to land tenure in Kent, and without offering any opinion on the course taken by the tenant, as I know nothing of the case beyond what is here stated, I think you will all agree with me that such a state of things is to be deplored:—

“LAND TENURE IN KENT.—One of the results of the unsatisfactory system of land tenure now prevailing in this country is to be seen at Knockholt, Kent. The lease held by Mr. Edwin Bath, of Curry Farm, in that parish, expires at Michaelmas, and he is not allowed to renew his tenancy, nor can he recover compensation from his landlord for a valuable plantation of thirty acres of raspberries on the farm. Consequently the extraordinary spectacle may now be seen of a reaping machine cutting down and a steam plough following it rooting up this plantation, which has cost a very large expenditure of time and money to produce. When it is considered that the produce of the plantation in question realised in the present year upwards of £1,690, and that the plantation was vigorous and in full bearing, some idea may be formed of the sacrifice of property involved.”

Further: It has often struck me that the manner in which the charges on land are levied is not equitable, and is calculated to discourage rather than encourage the planting of fruit trees for profit. A few words will, I think, make this plain. A man plants fruit trees not looking for any quantity of fruit for four years. During that period he receives nothing, or next to nothing, in the shape of produce, although rent charges on land and expenses of cultivation are going on and have to be met. Then when his crop brings him a larger return than ordinary farm

produce would bring, the charges on the land are raised! Now it would seem only fair, if the charges on land are calculated according to the value of the annual crop, the planter of fruit trees should pay nothing the first four years.

4. SORTS.—Of large fruits grown for profit apples would seem to stand first, plums next, then pears, then cherries. Of small fruits, strawberries, raspberries, currants, and gooseberries are the most important; filberts may also be planted to give a profitable crop in odd sheltered spots where other fruits would not grow well. But these different fruits do not all require precisely the same climate and soil. The apple is perhaps the least particular in these respects, some varieties of which will thrive and produce large crops of good fruit in almost any well-drained soil when grafted or budded on the crab or apple stock; the Paradise stock I have found next to useless under field culture on the clayey soils of Sussex. There are twenty-four sorts of apples which I should plant in preference to others in my own county (Hertfordshire), having an eye to the disposal of the crop as well as to its production. They are: Blenheim Orange, Cox's Orange Pippin, Cox's Pomona, Devonshire Quarrenden, Ecklinville, Duchess of Oldenburg, Irish Peach, Keswick, King of the Pippins, Lord Suffield, Small's Admirable, Stirling Castle, Sturmer Pippin, Warner's King, Wellington, Hawthornden, Cellini, Beauty of Kent, Dutch Mignonne, Northern Greening, Early Julien, Golden Spire, Worcester Pearmain, and Pott's Seedling.

I can speak favourably of the Ecklinville from experiments made both in Herts and Sussex. I planted in Sussex four years ago two hundred Ecklinville apples that had been cut back as maidens to $2\frac{1}{2}$ ft. The soil (a quarter of an acre) was good, and had been subsoiled 18 in. deep a few years previously. They grew well. The third year they produced five bushels, the fourth year seventeen bushels, which sold on the ground at 5s. a bushel. They were planted about 6 ft. by 6 ft., but strong growers might be planted 9 ft. by 9 ft., and small fruits or vegetables might be grown between the trees for a few years. I estimate the expenses of planting and cultivating these two hundred Ecklinville apple trees on a quarter of an acre of ground in 1884 as follows:—

Cost of trees, 200 at 50s. per 100	£5	0	0
Planting and digging	0	15	0
Four years' cultivation, at 15s. per year	3	0	0
Rent, rates, &c., at 10s. per year	2	0	0
	<hr/>		
	£10	15	0

Returns in 1888:

Twenty-two Bushels of Apples sold on the ground, at 5s. per bushel	£5	10	0
	<hr/>		
	£5	5	0

Next year I expect to get the outlay back, and look to the future for profits.

In exposed situations pyramid or bush trees are preferable to standards, because the fruit is not so liable to be blown down, and in large orchards, if the trees have stems $2\frac{1}{2}$ to 3 ft. high, sheep could run under them to feed, and thus help the returns.

PLUMS.—The Early Prolific, Early Orleans, The Czar, Belgian, Orleans, Diamond, Belle de Septembre, Pond's Seedling, Prince Englebert, and the Victoria are good ones. Purple and Pershore damsons also, of which the Farleigh is well to the front, are usually a profitable crop.

PEARS want a better climate and a warmer, richer, and deeper soil than apples, and are not usually so profitable a crop as apples. They do well as a rule on a subsoil of chalk. Of pears, Aston Town, Eyewood, Hessle, Williams' Bon Chrétien, Beurré de Capiaumont, Beurré d'Amanlis, Mons. le Curé, or Vicar of Winkfield, Doyenné d'Été, Madame Treyve, and Marie Louise d'Uccle, are the most profitable sorts to grow in Hertfordshire; Louise Bonne of Jersey, where it will grow, and Marie Louise, where it will bear freely, are also good varieties.

CHERRIES like a lighter and deeper soil than apples. The May Duke, Bigarreau, Napoleon, White Heart, Governor Wood, Frogmore Early Bigarreau, and Kentish are good sorts.

STRAWBERRIES.—Vicomtesse Héricart de Thury, Sir J. Paxton, Elton Pine, President, Sir Charles Napier, Oscar, Premier, Dr. Hogg, James Veitch, Loxford Hall Seedling.

RASPBERRIES.—Carter's Prolific, Fastolf, Fillbasket, Red Antwerp.

CURRENTS.—Black Naples, Red Dutch, White Dutch, Raby Castle, La Versailles, Cherry, Lee's Prolific Black.

GOOSEBERRIES.—Whitesmith, Warrington, Companion, Lion's Provider, Roaring Lion, Broomgirl, Dublin, Crown Bob, Lancashire Lad.

In selecting sorts of fruits it should not be lost sight of that some sorts flower later than others, and the blossoms of some sorts are more frost-proof than others, and thus the crop is often saved by late-flowering or frost-resisting blossoms. If I were about to plant fruit trees for profit, I should look closely to these matters in the selection of sorts. I would also examine all the fruit trees, and talk to all the practical gardeners in the neighbourhood whom I could persuade to listen to me, to ascertain which sorts produced the best and most certain crops in the district.

In conclusion, let me say that the grower's work is only partly done when he gathers his crops. He has to sell them as a

matter of profit. Like other men of business, he must be sufficiently intelligent, industrious, and energetic to find the best market for them, and to pack them properly, if packing is needed, or he misses the reward of his skill and labour. A crop may often be disposed of to advantage in the neighbourhood where grown, and when this is the case the cost of packing, carriage, and commission is saved.

DISCUSSION.

Mr. TONKS asked why Jefferson was omitted from the list of plums?

Mr. W. PAUL: It is excellent for gardens, but not a sufficiently sure bearer for planting for profit.

Mr. PEARSON: Was it legal to destroy the raspberries as described?

Mr. WOOD: A market gardener is under precisely the same law as a nurseryman, who may destroy all the ground crops like raspberries and strawberries, but may not destroy apples and pears unless he replants.

Mr. A. DEAN considered gooseberries very valuable as a bottom crop, because they could be used green as well as ripe, and were in that way superior to other ground crops, giving the grower a much longer time during which to put them on the market. Trees should not be looked to to return a profit under four or five years, during which time an income might be derived by planting under them violets, wallflowers, &c.

Mr. SHIRLEY HIBBERD, speaking on the subject of frost, said its effects were different according to the strata of the atmosphere. At 10 ft. above the surface frost was usually less intense than immediately in contact with the surface. There was more risk up to 10 ft. than above it.

Mr. PAUL said that was not so always, as sometimes they had a better crop of fruit at the bottom of trees than at the top. But as a rule the frost was more severe close to the ground, especially in spring and autumn, than it was at certain heights; but he did not think it was universally so.

Mr. ROUPELL said that a cutting wind at the top was worse than a frost at the bottom. A Duchess of Oldenburg apple was in full bloom in 10° of frost, and remained uninjured, while taller trees were very much more affected, because of the wind blowing a gale.

Mr. LE^e MAITRE asked why British Queen was omitted from the list of strawberries?

Mr. PAUL replied that he had a high opinion of British Queen, but he should not plant it for market. He preferred Dr. Hogg, which was not only a better cropper, but commanded a better price also.

Mr. TONKS could quite understand why it was left out. He grew a large number of strawberries, but he could not get the British Queen to fruit at all on his ground.

Mr. T. BUNYARD spoke as to the effect of climate on fruit trees. Everything had been considered but dew. He had noticed on fruit trees, that while the lower branches had been saturated with dew the upper branches were quite dry. He thought frost would have a more injurious effect on dew-saturated blossoms than on the dry ones. The water got in and ruptured the germ, and there was an end of the fruit.

Mr. GEORGE BUNYARD remarked that no one could help being struck with the different effects of frost on different varieties of fruit. If you look on an orchard in blossom you will notice that some trees hold the flowers much more upright than others, and in some the blooms quite hang down, *e.g.*, Jargonelle Pear; and this might be a point worth noticing with regard to the varying effects of frost. He would also recommend planters to have an eye to the habit of different varieties. The Czar Plum, for instance, he considered better than the Prolific, if there was to be an under crop between, for the Czar grows erect like a Lombardy Poplar, whereas in a very few years Prolific would come down on to the undergrowth.

Mr. PEARSON said that after fruit trees were once planted, if anything went wrong it was always the nurseryman who was blamed and never the planter; whereas if you examined into the matter you would find nine times out of ten that the trees had been thoroughly good trees to start with, but that they had been either simply stuck into a hole or planted too deep. As a general rule he thought trees were planted nearly always three times too deep. He could not consider anything more unjust to the fruit tree than to have its roots buried so deeply that they could not get sun or air. He was against deep planting, and he would even suggest that on heavy strong land planting should be done on a mound, and the more they prepared the land the better would be the result. Replying to a question as to how deep he would plant, he said there was always a mark round the tree as it grew in the nursery, and if they planted to the same point again they could not go wrong.

Mr. SHIRLEY HIBBERD said he should like to point out a source of danger in private gardens where "sticking in" was done. Wherever a tree had been for any considerable length of time it was a dangerous matter to plant another in the same spot, for nine times out of ten there would be in the soil a number of the old roots, which would breed a mass of fungus.

Mr. DEAN said his rule was to plant plums where apples had been, as while plums took one constituent out of the soil, apples took another.

DESSERT PEARS.

THE FEWEST NECESSARY TO SUPPLY RIPE FRUIT FROM
AUGUST TO MARCH.

By Mr. W. WILDSMITH, F.R.H.S., Heckfield, Hants.

The subject of this paper was suggested to my mind by the controversy about a reduction of the number of the varieties of pears that took place in one of the horticultural journals a few months since. The general tone of that discussion went to show that there was a unanimous feeling in favour of reducing the number of varieties, but to what extent, opinions differed greatly, twelve being suggested by more than one writer as the maximum number of varieties—a proposition that in some respects I had a good deal of sympathy with, but the number twelve ended, so far as I was concerned, simply because I knew from years of experience that no twelve kinds that could be named by the greatest expert in pear lore would suffice to give an unbroken succession of ripe fruit throughout the pear season—say from the beginning of August to the middle of March. That twelve kinds might be selected that would extend over the pear season is quite another matter. I have long had the honour to serve an employer whose favourite fruit is the pear, and, consequently, have had to give special attention to it; and if one point more than another has had to be studied, it is that of quality, a solitary flavourless fruit of an otherwise good variety has not unseldom been the cause of the condemnation of the variety generally. I name this to show that my experience has been gained at some cost of labour and anxiety; and at the risk of being considered egotistical I think this entitles me to speak with some degree of confidence about this matter of limitation of sorts. Every fruit grower knows how precarious and how variable the pear is in different soils, aspects, and positions, and no twelve kinds, however good they may be in one garden or district, will be equally so in another, even but a mile or two away, nor even in the same garden can they be relied on to be of the same excellence any two consecutive years; and it is this precariousness that I think renders it necessary to grow a good number of varieties. For the purpose of this paper I have closely examined the pear notes in my diary for several years, in which are noted the dates of gathering and ripening, and the duration, *i.e.*, the time they continued fit for table, and from these notes I have compiled a list of twelve that, supposing I was compelled to grow only that number, would be likely to give me the most regular (not constant) succession of fruit. They are

placed in the order in which they ripened here: Williams' Bon Chrétien, Fondante d'Automne, Beurré Superfin, Marie Louise, Thompson's, Doyenné du Comice, Glou Morceau, Winter Nelis, Josephine de Malines, Huyshe's Victoria, Easter Beurré, and Bergamotte d'Espéren.

These twelve kinds constitute the cream of all the varieties (nearly one hundred) that are grown here, and out of the twelve there are but two that are at all liable to prove of doubtful quality, and this from a cause over which we have no control, namely, a sunless season. The two kinds in question are Easter Beurré and Bergamotte d'Espéren, both of them late varieties, and requiring a longer season of sunshine than the others. I may, however, add that I have occasionally in a sunless season had recourse to means that have tended to make both of the kinds palatable, namely, by wrapping the fruit separately in tissue paper, and placing them in shallow baskets in a dry, warm room for ten days or a fortnight before the fruit were required for use. And now with respect to the question of the number of varieties "necessary to ensure a continuous supply of ripe fruit." I have, after considerable deliberation, founded on the practical experience of many years, come to the conclusion that it is next to impossible to accomplish the feat with a less number than twenty-five varieties. To some this number may appear excessive, and to such I ought to explain that my experience is given from the standpoint of a private gentleman's gardener—say of a large garden—and from which liberal supplies of pears are demanded all the season through, and therefore it is necessary to have, as it were, two strings to one's bow; as, for instance, if Williams' Bon Chrétien Pear run short, I ought to have Beurré de l'Assomption to supply the lack; or if Marie Louise be scarce, I must eke out with Beurré Bosc; and so on, to the end of the chapter.

I regret that I have not practically tested with how few it is possible to keep up a constant supply, but I am sure I should fail if I undertook the task with a less number than twenty-five, and the following are their names, and placed in order of ripening:—Souvenir du Congrès, Williams' Bon Chrétien, Beurré d'Amanlis, Fondante d'Automne, Louise Bonne of Jersey, Madame Treyve, Beurré Hardy, Beurré Superfin, Seckle, Marie Louise, Doyenné du Comice, Thompson's, Duchesse d'Angoulême, Glou Morceau, Winter Nelis, Comte de Lamy, Beurré Bachelier, Josephine de Malines, Winter Crassane, Huyshe's Victoria, Olivier de Serres, Easter Beurré, Ne Plus Meuris, Knight's Monarch, and Bergamotte d'Espéren. All these are generally well-known varieties in most parts of Britain—proof sufficient, I think, of their excellence; and I can vouch for their reliability for this district in respect of constant and free bearing, and their high quality.

The least meritorious in the list are:—Madame Treyve (quickly over), Duchesse d'Angoulême (gritty), Beurré Bachelier (mealy), and Ne Plus Meuris (gritty), yet I know no other four kinds that can—all points considered—replace them. Lest any one should conclude from what I have said as to the number of kinds to ensure a regular succession of useful fruit, that that is all that is required to make certain of the supplies, I will undeceive them at once by saying, No. There is no fruit that gives better returns for labour expended, and none that more quickly resents the "let alone" policy that one is occasionally compelled to behold. As regards the former, nearly all our trees are grafted on the quince, from which stock it is no exaggeration to say that we get at least double the fruit that we do from trees on the pear stock, and high feeding is therefore a matter of necessity; but the labour of applying these manurial mulchings we place as a set-off against that of the time expended in root pruning that nearly all trees on the pear stock require about every alternate year, and the fruit is neither so numerous nor so well coloured, and not superior in quality. No, if good crops of fruit are expected annually, water and mulch, mulch and water, must be the order of the day all through the fruit-swelling season. They who by reason of restricted space can only grow a few varieties, and whose demands for fruit are, as a matter of course, proportionately restricted, may do something towards lengthening out the supply of ripe fruit by gathering the same variety of pear at varying intervals of from a week to ten days. The fruit of most varieties—more especially the earlier kinds—will then ripen at similar intervals, and thus the season of ripe fruit may be considerably extended. To those who have unlimited room, and can therefore grow the required number of varieties to ensure supplies, this piece-meal gathering is not of so much consequence, nevertheless I strongly advise its being done with any varieties that ripen rapidly, such as Citron des Carmes, Jargonelle, Williams' Bon Chrétien, and Fondante d'Automne.

ON PRUNING.

By Mr. SHIRLEY HIBBERD, F.R.H.S.

It is commonly asserted in books, and forms part of the faith of mankind, that pruning tends to augment the vigour of trees, and as a consequence much of the pruning that is done has in view to promote the end predicated for it. There can no longer be entertained by observant men a doubt of the fact that pruning, so far from augmenting, actually diminishes the vigour of the subjects operated on, and the one sole reason that the

fact is not strikingly illustrated in the outdoor world is that Nature is generous, and accomplishes much in compensation for the injuries that are inflicted by the pruning knife. And because Nature is generous and compensative, a certain amount of pruning may be done without harm, and, as regards the objects we have in view in pruning fruit trees, with positive benefit. But so long as we keep in mind that pruning in the abstract is objectionable, we shall be careful to prune in a way to ensure a maximum of the advantage for ourselves, with a minimum of disadvantage to the trees.

Keeping this in mind, we may at once compare the several forms of trees with a view to arrive at conclusions as to their relative values. For the present we will compare standards, pyramids, and bushes. We must deal with them generally, and make broad comparisons, for particular cases would require particular consideration, that would be scarcely possible in connection with this Conference.

We will begin with standard orchard trees that bear abundantly, as many orchard trees do. It will be observed that pruning neither augments the vigour of these trees nor does it promote their fruitfulness, for as, generally speaking, they are not pruned at all, they teach a bold lesson of the non-necessity of pruning. Now we will turn to the perfect pyramids, say of apples and pears, formed to an ideal model by long years of pruning and pinching. As pyramids they are perfect, being of even contour, dense with foliage, with scarcely room anywhere to allow one to thrust a hand in, and they are healthy and bright from the ground line to the summit. It has to be remarked of these compact, leafy trees that they produce so little fruit as but rarely to pay a fair return for the land they occupy. They do, indeed, occasionally present their owner with a crop, and often he is satisfied. But if we are to take measures for increasing the production of fruit we shall rather avoid than accept trees of this form, or, if we must have them, we shall, having fruit in view, rather promote an open growth with room to thrust one's head in at many places, this form of tree being favourable to fruit production. We have in our collections many kinds of apples and pears that will not, no matter what we do to them, conform to our ideal of the perfect pyramid. It is usual, therefore, to suffer these to grow as open loose bushes, and the difference between them and the pinched pyramids is seen not only in the form and furnishing, but in their superior fruitfulness.

Pursuing the comparison, it will be observed that pruning tends to promote secondary growth which is often immature when the season closes. This growth, therefore, has been obtained by a false system, and its uselessness is a proper commentary on the violence done to nature. The perfect pyramid

is for ever loaded with immature wood that earns nothing, and the density of the foliage so completely excludes the light and air from the wood that fruit spurs are few and commonly unproductive. The free bushes that are not pruned at all, or but moderately pruned, are, as a rule, vastly more fruitful than the pyramids, and the free standards are more fruitful than either. Thus, as a matter of fact, the order of fruitfulness is in an inverse ratio to the order of the pruning, and we may conclude that the pruning knife is a deadly enemy to apples and pears.

The natural growth of a fruit tree is definite and orderly, but much of our practice appears to proceed on the hypothesis that it is a matter of accident. There is sent forth a certain number of long rods. If these are cut back, secondary rods appear, and by stopping these we obtain a lot of soft spray, and so on for ever. But the long rods left to themselves throw out a few side branches and form fruit spurs the greater part of their length. In due time the fruit appears. Often, where the soil and climate favour the business, and the varieties are naturally free-bearing, the fruit may be seen to hang like ropes of onions, while at the same time pruned trees of the self-same sorts are thinly dotted with fruit, so that we can actually count them, which in the other case is impossible. The unpruned standards and bushes are free to follow the course of nature, and we see them fruiting abundantly and frequently, while the pruned trees fruit scantily and seldom. The obvious lesson is that long rods admitting light and air freely are more serviceable than rods systematically cut back, and thereby compelled to become densely furnished, forming compact trees impervious to light and air, as compared with the free trees, that delight to display their fruits in the fullest exposure. The leading shoots, therefore, should never be shortened except for some special reason.

In the year 1876 I had the honour of reading before the Society of Arts a paper on "Fallacies in Fruit Culture." One of my objects was to demonstrate that systematic pruning and pinching of open ground fruit trees deferred and limited the production of fruit, although these operations were intended to hasten and augment fruit production. And I placed before the meeting for inspection and criticism a number of trees that I had in the first instance selected for their ugliness, but which, having for some years occupied a good soil in a suitable situation, had acquired symmetry, and proportion, and fruitfulness without aid from the pruning knife, one great point in the matter being that every annual growth had been allowed to acquire maturity, no secondary growth being promoted by summer pinching, and no superabundance of furniture resulting from winter pruning. Some of you will remember that in doing this I exposed myself to what I may now recall as a shower of hot shot; but I live still, and repeat the story, and if another dose of hot shot is ready for

me I will not flinch so much as to move my eyelids, so sure am I that common sense will at last prevail, and that it will be agreed all round that Nature has something to do with the production of fruit.

I have the consolation, however, of knowing that common sense has prevailed. The horticultural papers altered their tone on the subject of pruning from that date; practical gardeners who lead by intelligence and example saw and acknowledged I was right, and to their advantage they have used the knife less freely than formerly. Moreover, since the year 1876 we have had a succession of Apple and Pear Conferences, and their collective lesson appears to be *Magna est veritas et prævalebit*, for have we not entered on a new career in fruit culture, common sense guiding the way, because only where common sense prevails does Nature prove herself in every sense the friend of man. While we repudiate reason, Nature destroys our false work, and does not even stop there, for she destroys man himself, and history is in great part the record of the price that man has paid for adherence to unreason, superstition, and folly.

Amongst the many persons who have carried out my proposals, I will name Mr. James Hudson, the gardener at Gunnersbury House, who is known to you, and whose work is near at hand. He had long lamented the unfruitfulness of a collection of good varieties of dessert pears, but he saw no way to improve them but to continue the practice of pruning. He saw my sample trees in 1876, and from that time he allowed the trees to manage their own affairs, since which they have been constantly and abundantly fruitful. Mr. J. James, then gardener at Redlees, took a similar course, and secured equally happy results. In this garden of the Royal Horticultural Society you may see collections of pyramid pears that have been systematically summer pruned for any number of years, and have borne moderate crops intermittently. But you may also see a collection of apple trees in the form of free bushes that have only been lightly winter-pruned to keep them somewhat in order, and they have been constantly and abundantly fruitful, and, in fact, have every year for several years past illustrated my idea of fruits displayed like ropes of onions. In the famous garden at Calcot, near Reading, where the late Mr. Richard Webb had every year finer crops of fruit than probably could be found in any garden of similar extent in all the home counties, there was absolutely no pruning practised; the trees never made more than a moderate growth, though in land of great strength, and the fruit was of such quality that Mr. Webb took a high place in great exhibitions as well as in Covent Garden Market. When lately at Heckfield, Mr. Wildsmith pointed out some pear trees under "reverse" training that proved more than ordinarily fruitful. This reverse training does not pay when it is carried out in a severe

manner by the aid of the knife and a multiplicity of ligatures, for that system is a mere warfare against nature which can never pay. It is in this case practised in a coaxing kind of way; the trees know but little of the knife, and the long rods are brought down gently, as I suggested years ago in what I termed "pulley pruning." Many fruitful trees acquire a half-weeping habit from the mere effect of the weight of the fruit, which brings down the branches. There is no merit in observing this, but there is merit in taking from the fact a lesson in cultivation. The reverse position of the branch checks growth, exposes the wood and the fruit most completely to the sun and the air, and we may say the mere fact of fruitfulness is promotive of fruitfulness, the half-weeping habit that the law of gravitation enforces on the tree exactly suits its constitution as a fruit-producer. Very much of the prevailing practice in pruning promotes rigidity of growth, and compels the tree to be a mere leaf-producer.

Now to conclude. Observation and experience have taught me that summer pruning is too promotive of useless secondary growth to be advantageous; and it tends also to keep the roots in action until late in the year, when they ought to be at rest. The effort of the tree to ripen useless wood is detrimental to its more profitable duties. Prune immediately after the fruit is gathered, first cutting out all dead wood, then cutting out cross and ill-placed shoots that would interfere with the free play of light and air, and then conceal the pruning knife lest anyone should venture to cut back the long rods, and so renew the old warfare between useless wood and useful fruit.

Pyramid trees of many sorts of pears will acquire beauty of contour, and become regularly furnished, and will produce abundance of fruit without any pruning whatever, as I have shown by my trees that for fifteen years continuously were never touched with the knife. The lower branches of pyramid trees never bear fruit, probably from proximity to the ground and its exhalations, as well as from the low temperature that often prevails at that level. When left to form themselves, or aided in quite an infinitesimal degree, they remain open to light and air, and soon become well clothed with spurs that ripen perfectly and do their duty. The dense, leafy pyramids are useless in proportion to their leafiness, and very often it may be said that the free bushes and standards are useful in proportion to their leanness, and it must be owned that many of the lean trees are amongst the most profitable. Long rods pay, short rods are more plague than profit.

A most instructive contrast between the useless pyramids and the profitable standards has occurred in the garden planted many years since by my friend Mr. J. B. Saunders, then of The Laurels, Taunton, now of Teignmouth. Mr. Saunders was proud of his pinched pyramid trees, and managed them with orthodox

care. They were but moderately fruitful, though models of form, and as handsome in leafage as camellias. In the course of time, my friend having left Taunton, a portion of his beautiful garden, of which many of the pyramid trees were occupants, came into the possession of Mr. Godding, nurseryman, of that town. This gentleman soon discovered that the pyramids would never pay rent for the land they covered, and he determined that they should pay liberally, and cover no land at all. He cut them back to sheer stems, of seven to ten feet or so, according to their form and stature, and allowed them to form free heads over the gravel walks. They have done this; he crops the borders under them to their very stems, and they arch over the walks, forming rustic bowers, and their fruitfulness is such that it is necessary to provide artificial support to save them from self-destruction. You have never seen pinched pyramids in the deplorable condition of needing artificial support.

Of wall and cordon trees I do not propose to say anything at this time, except that they must be amenable to common sense, and nature must have some freedom even where the trees are so fettered. Of one thing I am satisfied, that any system of pruning that promotes a late summer growth is pernicious, for it is not possible in this climate that fruit trees can make and mature useful wood after the passing of Midsummer day.

DISCUSSION.

Mr. PEARSON thought Mr. Hibberd rather meant to talk about bad pruning *v.* good pruning than the non-necessity of any pruning at all; indeed, his own arguments proved that the pruning knife is required. What use was it to have pears hanging like ropes of onions, for if they were as thick as all that they would certainly not be worth much when you had got them. To get really good fruit it was absolutely necessary to give a space of nine inches between the branches, both of wall and bush trees, and to do this the side shoots must be pruned off to let in air and light. The trees Mr. Hibberd condemned were not "pruned," but clipped more like yews for a hedge. If the pear trees in the Society's gardens had been left as Mr. Hibberd would have them they could not possibly have borne better crops; for he noticed, in passing through to the Conference, that although they had many of them been somewhat severely pruned, they were bearing very heavy crops of excellent fruit.

Mr. WRIGHT said the longer he lived the less he should use the knife in pruning if his object was to get the greatest possible amount of fruit; but if pruning was skilfully conducted, you certainly obtained finer fruits. He referred to the pear trees at Cardiff Castle, planted on the pear stock, and said they had been allowed to assume their natural habits, the only pruning they had

undergone being the taking out of a few branches here and there so that the sun could shine through. Those trees were bearing three or four bushels of fruit as good as could be found in the exhibition. The great object was to let light shine through the trees, which would then form natural spurs. There were, however, in the garden some good examples of pruning and non-pruning. On the whole, for commercial fruit-growing people, Mr. Hibberd, he considered, was right. He would only add that the autumn, when the leaves were still on, was the right time to prune, as you then could see where the trees were most crowded, so as to let in sun and air.

Mr. CANNON remarked that he had often been called in to examine the pyramid trees that were now so much the fashion in the villa gardens round London, and he had come to the conclusion that *bad* pruning, not *pruning*, was the cause of their bearing no fruit. If a pear tree were pruned into shape like an Irish yew, no wonder if it were barren.

Mr. HIBBERD agreed entirely in cutting out the side growths to keep the trees open and let in air and light, but he thought we did want fruit like ropes of onions if they were good. No power on earth could put fruit on a tree, but it was easy enough to take a few off. The matter of quality was entirely in the gardener's hands by feeding the roots and thinning the crop, but thinning was too long a process ever to pay the market grower. If first-rate samples are wanted, you must prune lightly, and feed and thin heavily.

Mr. WM. PAUL said that, whilst to some extent he agreed with Mr. Hibberd, he should be sorry for people to go away from this Conference under the idea that there was no need to prune fruit trees. Many a fruitful tree would become comparatively barren if from henceforth it was left altogether unpruned, whereas many a barren tree might, by experienced pruning, be at once thrown into bearing. All, therefore, should remember that pruning *was necessary*, and that it was only injudicious or excessive pruning that was condemned.

THURSDAY, OCTOBER 18.

SHIRLEY HIBBERD, Esq., F.R.H.S., in the Chair.

The Conference was resumed at 1.30 o'clock.

CANKER IN FRUIT TREES.

By Mr. EDMUND TONKS, B.C.L., F.R.H.S., Knowle,
Warwickshire.

I have been requested to contribute a short paper for discussion at this meeting, and as the results of some experiments recently made by me appear to indicate that there may be a remedy for that worst of all diseases affecting fruit trees—canker, which is described in the "Herefordshire Pomona" as "the terror of all orchardists and the bane of most orchards," I thought it right to comply with the request. As my own experience scarcely extends beyond my garden, and numerous duties have prevented me from devoting even there that close and continued observation which is necessary for the proper study of such a subject, I should have hesitated to intrude my crude notions in antagonism to the authorities if their views had been clear and definite; but as these are very vague, both as to the cause and the cure of the disease, I venture to state my own. Thompson, in the "Gardener's Assistant," says: "The cause is imperfectly understood, and so consequently is an effectual cure;" Mr. Fish, in "Cassell's Popular Gardening," says: "In fact, it may almost be said to be incurable;" and the "Dictionary of Gardening," the most recent publication on the subject, says: "Were the causes better known, the remedy might generally be much easier found." Yet these, and most of the other writers on the subject, according to my idea, indirectly indicate both the cause and the remedy for the disease, the cause being mal-nutrition, the consequence of an imperfect provision in the soil of the food required by the plant; the remedy, the supply of the food which is deficient. These writers inferentially indicate this remedy: for instance, Thompson recommends that "the soil be ameliorated by trenching and other means;" Mr. Fish, in "Popular Gardening," says: "Lift the root into higher places of warmth, and better and more immediately available supplies of food;" and the "Dictionary of Gardening" says: "Trees that are badly cankered may be improved by lifting and replanting in improved or better drained soil."

Perhaps the most convenient method of dealing with the subject in detail is to analyse, paragraph by paragraph, all that is stated relating to canker by some recent and recognised authority; that splendid work, the "*Herefordshire Pomona*," is possibly the best for the purpose, as it may be assumed to contain a summary of the most recent knowledge of all that relates to orchard growth. The first paragraph of the passage in that work relating to canker states that "it is always due to direct injury." In a controversy a clear and definite issue is most satisfactory, therefore, with all submission, I venture to assert that it is never due to such cause. That canker may appear in parts which have been injured is no proof that the injury caused the canker, although the injury may determine the particular spot where the disease makes itself visible. A well-nourished and consequently healthy tree may be injured to any extent without development of canker, while an ill-nourished tree, or, to avoid begging the question, a tree infected with the disease, will develop in all parts the external signs without the slightest injury or abrasion of any kind, and very frequently on parts where, from their well-protected position, such as the angles of the branches with the main stem, it is almost impossible that injury could take place. The coincidence of canker and an injured part is no more proof of the former having been caused by the injury than a hole in a building through which the flames of a conflagration are first visible is the cause of the fire.

The second paragraph states that "weakness is at the bottom of the canker." This weakness cannot be want of apparent vigour of growth, for I have frequently observed trees attacked which for a number of years have made the strongest growth, yet the disease has appeared before any external signs of weakness were visible; the very vigour of the growth in some cases appearing to hasten the attack in a soil containing too limited a supply of the necessary food, as that supply is sooner exhausted, and the time arrives when the large tree can no longer find within reach of its roots sufficient for its maintenance. It may be that only one element of food is failing, but every element is indispensable for perfect growth of the whole tree, and that failure would fully account for arrest of growth in parts, weakness, and consequent disease.

The third paragraph is "the tree is old." This may be expressed in other words—the tree has for a long time been growing in the same soil. It is not difficult to realise that in the course of many years a tree may exhaust the most fertile soil. Many seem to overlook the necessity of restoring to the soil what is taken away year after year by large crops of fruit. However rich the soil may have been originally, each crop takes away a definite quantity of the food required by the tree, until in time insufficient remains; then the tree fails, not through age, but

through inanition. The same gardeners who leave their fruit trees unfed would think it most unreasonable to expect them to grow their crops of vegetables without manure.

The fourth paragraph is, "or the variety is very old or very delicate." This raises the much-vexed question whether a seminal plant has a finite life, or one which can be prolonged indefinitely by propagation. Experience seems to prove that individual life has a limit, though there is evidence that many seminal plants have a very prolonged existence; however, the limits of this paper do not allow the present discussion of the question. It may be sufficient to say that observation does not lead me to believe that the age or delicacy of a variety renders it more liable to canker when the soil contains what it requires.

The fifth paragraph suggests "that the soil is not sufficiently drained." Canker, according to my observation, occurs equally on well-drained as on ill-drained soils; it is not a question of condition of roots. My own garden formerly contained several trees rapidly succumbing to canker, which, when grafted with other varieties, at once put on healthy growth, made fine heads, and have since for many years been perfectly free from the disease. Each variety requires its own appropriate food; strawberries afford a very good illustration of this. I have among my friends the reputation of growing this fruit to perfection, yet I had the greatest difficulty in finding varieties which would do fairly in my soil, and after trial of many more than a hundred, have so far discovered only about half a dozen which are moderately successful. British Queen refused to fruit; Dr. Hogg bore fairly as an annual, but did not survive to the second season; in fact, all the Queen race and many other kinds only do more or less ill. Such being the case, it is not unreasonable to believe that some varieties of fruit trees find in some soils what they require, while others do not, and in consequence become subject to canker.

The sixth paragraph is, "or it (the soil) may be too poor." I quite agree with this, as I believe a deficiency in the soil of the necessary food of the tree is the cause of canker.

Seventhly, "The wood may be weak, and is not well ripened, when a sudden frost, especially after rain, ruptures the vessels, and this forms the chief cause of canker." Unripe wood, which is, however, often the result of imperfect nutrition, is productive of much mischief of a temporary nature; but as canker attacks well-matured wood, I cannot believe it to be in any case its cause, although when its real cause is at work it may appear on such wood.

In the eighth paragraph the author repeats himself. "Any direct injury, however, to the bark of a tree, as from friction of one branch upon another, the pressure of a clothes line tied from tree to tree, or injury from a ladder in fruit gathering, may all

cause it, even in healthy trees." This calls for no further reply than that given to the first paragraph.

Finally, the author states that "Canker commences with an enlargement of the vessels of the bark, more apparent, by the way, in apple than in pear trees, and continues to increase until in the course of a year or two the alburnum dies, the bark cracks, rises in large scales, and falls off, leaving the trunk dead, and ready to break off with the first wind if not before removed. The canker shows itself quickly, and if the cause be sought for it will often admit of a remedy. The most usually effective is a good supply of nourishment to the trees affected, together with the removal of the parts injured." I confess that the preliminary symptoms described as the enlargement of the vessels of the bark have escaped my observation; but there appears to be some contradiction in the statement, as while the first symptoms of the disease are described as extending over a year or two, further on it is stated that canker shows itself quickly. However, although I differ so much from the writer of the article in the "*Pomona*" as to the causes of canker, we are agreed on the remedy, namely, "a good supply of nourishment to the trees."

In 1886 my attention was specially directed to plant food, having been requested to write a paper on that subject for the Birmingham Gardeners' Association. In the same year, having noticed that a number of apple trees in my collection had become unsightly through canker, I marked about a dozen of them for destruction; but while studying the subject of plant food, which involved the consideration of the analysis of various plants, I was very much struck with those of the fruit and wood of the apple in Wolff's "*Aschen Analysen*," the great authority on plant analysis. I found that the fruit contained an exceptionally large proportion of soda, and the wood of lime. This at once suggested the idea that my soil might not contain sufficient of one or both of these elements to supply the wants of the apple tree; therefore I resolved, instead of destroying the marked trees, to give them and all my apple trees a good dressing of a complete artificial manure which contained full proportions of soda and lime. In the following season, 1887, which was exceptionally hot and dry, either through the drought, the manure, or some other cause, not a spot of active canker could be found; all the edges of the old wounds on the marked and other trees, almost as badly affected, had put out granulations and healed over, and the trees, many of which had previously ceased to extend, made healthy and vigorous growth. Last winter the trees were again dressed with the same manure; this season they have been exposed to the most unfavourable conditions: the soil to a great depth was almost dust dry when they were making their first growth, while an army of caterpillars ruined what foliage was made. Then followed the most continuous cold weather and rain experienced

for many years. Notwithstanding conditions so conducive to the extension of disease, there is at the present time still no appearance of active canker. The trees have been carefully inspected by some experienced pomologists, who, doubtless, will confirm my statement. Short as is the time during which the trees have been submitted to the treatment, I can only conclude that the arrest of the disease is due to the supply of elements of food required by the trees, of which a sufficient quantity was not previously contained in the soil.

The food required by a plant is a complicated mixture of many elements, all of which are necessary for its well-being; the complete absence of one of them would be fatal; a deficient supply of one would arrest its development, and render it subject to disease. Nothing is more instructive and conclusive on this point than the copies of photographs of plants grown for the purpose of testing the effect of manures more or less complete, to be found in treatises on the subject. That of "Ville on Artificial Manures," published by Longmans, contains many such illustrations, which clearly show that when the soil contains every element of fertility but one it remains absolutely barren. For instance, in a soil without potash, the vine makes no growth.

It remains to say that the manures necessary to restore a tree to health vary as the soils; although the ashes of the wood of the apple tree contain 71 per cent. of lime—an exceptionally large quantity—it would not be necessary to supply this element on a lime formation; nor would soda be required in a soil near the sea, although on other geological formations or situations a deficiency of one or both may be the cause of canker. Like conditions apply to the other elements.

Various soils require such manures as will supply their various deficiencies; but, as it is most difficult to ascertain even by analysis what may be the deficiencies of a soil, the practical way of dealing with the subject is to study the analysis of the ashes of the plant in question, and to use a manure which is composed of these elements; for instance,

The ashes of the wood of the apple tree contain :

Potash	Soda	Magnesia	Lime	Iron	Phosphorus	Sulphur	Silica	Chlorine
12.0	1.6	5.7	71.0	—	4.6	2.9	1.8	0.2

and those of the fruit :

35.7	26.1	8.8	4.1	1.40	13.6	6.1	4.3	—
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Ville lays down the rule that soils generally contain sufficient of all the mineral elements except potash, lime, and phosphorus, and the gaseous element nitrogen, and says it is only necessary to supply to the soil manures which contain these four. This may be sufficient for the general purposes of cultivation, but more recent experiments have conclusively proved that the addition of

a small quantity of iron largely increases the development of foliage, and consequently of the plant. In dealing with a mysterious disease such as canker, I should not leave out either iron or magnesia.

The following formula, which may be varied as circumstances require, is suitable for the apple-tree:—

Superphosphate of Lime...	...	...	...	12 parts.
Nitrate of Potash ...	...	...	...	10 "
Chloride of Soda ...	...	...	...	4 "
Sulphate of Magnesia ...	...	...	...	2 "
Sulphate of Iron ...	...	...	...	1 "
Sulphate of Lime ...	...	...	...	8 "

This may be used at the rate of $\frac{1}{4}$ lb. to the square yard over the whole extent of soil within reach of the roots. It need not be dug in; one effect of the manure may be relied on—if it does not cure canker, it will, at any rate, most certainly benefit the trees.

I hope you will excuse me for having questioned some of the conclusions of great horticultural authorities, but it seems to me that some of these conclusions have been accepted without sufficient examination, as being time-honoured traditions handed down through many generations. Gardeners are, in this respect, perhaps a little too conservative.

I think much may be learnt by occasionally departing from these traditions and making independent experiments in cultivation; my own experience proves that many such experiments resulted in failures, but there is full compensation if only one useful discovery be made, or one error exploded.

DISCUSSION.

Mr. COLEMAN asked if lime should be used in a caustic state?

Mr. TONKS replied that gypsum and lime rubbish were convenient forms, but lime in any state would serve the same purpose.

Mr. ROUFELL presumed the lime should be slaked. He had used lime freely to trees in conjunction with soot, and he found the mixture imparted a much deeper red to the fruit and a darker green to the leaves, and generally improved and benefited the trees. Did he understand Mr. Tonks to say that it was impossible for canker to be introduced to healthy trees through a wound? Or did he only mean that a healthy tree resists the disease better than a weakly one? For his own part, he considered that in this respect there was an analogy between plant and animal life, and it was a well-known axiom in surgery that if a wound was left open to the settlement and action of atmospheric germs, it was far more liable to catch a disease than if it was bound up. Hence he considered that any wounds made in the bark of a tree by clumsy pruning, bad staking, by a ladder,

by gun shot, &c., were always liable to produce canker; in healthy trees, however, it made little progress, whilst trees rendered unhealthy through inferior soil or insufficient nourishment quickly succumbed. His advice, therefore, was to carefully protect all bark wounds from atmospheric disease germs.

Mr. TONKS did not believe canker to be due to germs of any sort, nor that wounds of any kind could produce it, although, no doubt, it might be that the disease developed more readily in injured parts.

Mr. CLARK asked how it was that canker attacked one sort and not another, when perhaps there was only a roadway between the different varieties?

Mr. TONKS: Because the food which one tree wants is quite different to that required by another. Years ago I had a tree of Citron des Carmes which grew excellently and bore well. After a time it showed signs of an attack of canker. I at once budded it with Pitmaston Duchess. In process of time the Citron des Carmes languished and ceased altogether to bear, and became a most miserable object. I then sawed off all but the bough budded. Hitherto the growth of the Pitmaston Duchess had been entirely pendulous, but it now took an upright habit of growth and became laden with fruit, though nothing whatever else had been done, thus proving that roots and soil which could not maintain Citron des Carmes were perfectly able to support Pitmaston Duchess in utmost luxuriance.

Mr. CLARK related how some years ago he took eighteen acres of meadow land and well trenched it, and planted 250 each of Cellini, Wellingtons, Early Juliens, &c. The Wellingtons grew well and prospered, but the Cellini all cankered after bearing for one or two years. He therefore cut off the heads of them all, and grafted the stems with Manks' Codlin, which at once started well, had no sign of canker, and bore well. The canker even disappeared from the stems. The Early Juliens were almost as bad as Cellini. So that it would appear as if canker attacked certain sorts, but was not in the soil, and the only cure for it was to cut clean out all the wood and every particle of bark that was suffering from it.

Mr. GEORGE BUNYARD thought that the effect of frost in producing canker had been overlooked. There were some sorts of apples did well and were in great request in Kent up till the severe frost of 1881, since which time the market growers had entirely given them up because they had cankered so badly. When the frost comes in spring, just as the sap is rising and the bark swelling, it is specially liable to cause canker. He knew of an orchard of young Cellini producing magnificent crops, but in 1882 they were all cankered, which he believed was all due to the frost, for the ground was an old hop garden which had been for years well manured. He had often noticed

when scions had been sent him to graft with they were often cankered, in which case the growth always kept cankered; but if one healthy bud could be found on the scion, and was transferred to a Paradise stock, it would be perfectly healthy, and seemed to rejoice in the fresh blood. The old Ribston, again, used to be noted for canker, but anyone might examine whole breadths of it now in his nursery and they would not find any canker where they were worked on the Paradise stock. He believed that those sorts and varieties which had the largest wood cells were the most easily hurt by the frost and induced to canker, the cells being ruptured through the excess of moisture that they contain.

Mr. CHEAL considered it to be most important to select thoroughly healthy trees from which to take grafts. He had been able to obtain a perfectly healthy stock of Ribstons by always selecting the healthiest grafts and the healthiest stocks, and in this way he had almost eradicated the disease.

Mr. FRASER said there could be no doubt that as certain diseases in animals were due to disease germs, so it was also with plants. A German *savant* had shown that a particular fungoid growth was always to be found in specimens of canker; he had also experimented with the germs of this fungus, growing them in some sort of broth, and then had inoculated trees with the product, and every one of the trees cankered. The name of the fungus was, he believed, *Nectria ditissima*, the same as was often found in the ash and the beech, and can be communicated from them to the apple and pear. They would probably all agree that fruit trees required feeding, and if the feeding did not destroy the disease it would at least help them to resist it, or assist them in throwing it off.

Mr. TONKS thought that Mr. Bunyard's remarks quite confirmed his experience, viz., that trees will grow well and bear well for a certain number of years and then become cankered. They do find sufficient root food for a time, but when it is exhausted canker is sure to ensue. With regard to the bacteria germ theory, no doubt it was just now very popular, and for anything he could tell bacteria might be at the bottom of many diseases, but the highest authorities are by no means agreed on the subject as yet—one man always finds what another equally clever cannot. Moreover, individual experiments are extremely unreliable, and do not deserve much attention until they have been confirmed by several independent observers. He was not prepared to deny the experiments that had been referred to, but he thought they were at least liable to the possibility of mistake, and he was not prepared to admit on such evidence that all canker was due to some low form of fungoid disease. The great advantage of his own remedy was that if it did not cure the canker it would do the trees good; it could do no harm, and it might do much good.

CANKER: ITS CAUSE AND CURE.

By Mr. JAMES DOUGLAS, F.R.H.S., Ilford, Essex.

This troublesome disease in fruit trees has very frequently been the subject of discussion in the gardening periodicals and elsewhere. Nearly every gardener has had to deal with it in his experience of the details of fruit culture, and as I had considerable experience of it, some twenty-five years ago, in an old Essex garden, I may at least claim some practical knowledge of the subject.

At the outset it may be taken for granted that it is absolutely necessary to ascertain the cause of a disease before any attempt can be made to find a remedy. The late Mr. Robert Thompson, author of the "Gardener's Assistant," and Superintendent of the Royal Horticultural Society's Garden at Chiswick, writes on canker with considerable diffidence. In the work above cited, page 381, he says: "The cause of canker is imperfectly understood, and so consequently is an effectual remedy."

His idea of the causes of canker, as summarised in his admirable work, are:—

1. Sudden checks to the vegetation of the tree, especially in spring and the early part of summer.
2. Derangements of the flow of sap from vicissitudes of heat and cold, as well as of moisture and dryness.
3. Unskilful and severe pruning.
4. Vitiating of the sap by deleterious substances in the soil or subsoil.
5. Dryness at the root doubtless gives rise to a species of canker, which manifests itself on the younger branches and on the shoots.

Referring also to Lindley's "Theory of Horticulture," page 110, it is stated that a Mr. Reid, of Balcarras, had shown "that one of the causes of canker and immature fruit even in orchards is the coldness of the soil. He found that in a cankered orchard the roots of the trees had entered the earth to the depth of three feet; and he also ascertained that during the summer months the average heat of the soil at six inches below the surface was 61 degrees; at nine inches, 57 degrees; at eighteen inches, 50 degrees; and at three feet, 44 degrees. He took measures to confine the roots to the soil near the surface, and the consequence was the disappearance of canker and perfect ripening of the fruit.

Another cause has been suggested, viz.: Insect agency. But this view of the matter will probably not be sustained by practical gardeners generally. That insects of various kinds, including that troublesome pest American blight (*Aphis lanigera*), will

penetrate into the cankered part for shelter is likely enough. Indeed, I can assert they do; but they are not there as the cause of canker, but because the cankered part affords a secure resting-place, which the smoother, healthier portion of the bark does not. Indeed, I can also assert that cankered trees may be found in the garden with insects upon the affected part, and others near them also cankered with no insects upon them.

My contention is that canker is caused in two ways, and affects two different parts of a tree. Perhaps the most serious disease is that which affects the trunk or larger branches of the tree. This I hold is caused by the roots pushing downwards into cold, undrained, or unsuitable soil. The other aspect of the disease is that which lays hold of the twiggy portion of the tree, for even the one-year old shoots do not escape. The immediate cause of this is probably owing to the rupture of the sap vessels by frost, when the sap is in an active state. But I have a firm belief that the primary cause is to be found in the condition of the roots, which, being in an inactive state owing to unsuitable soil or their penetration to a great depth, prevents the perfect ripening of the wood, or maturation of the blossom buds in the autumn.

I come now to my own experience in our old garden twenty-five years ago. There were upwards of one hundred trees of various sizes, some only a few years old, others a hundred years planted at least. Most of them were cankered, and in places where the old trees had been removed and young ones planted, canker showed itself in a few years.

The soil was light, over a gravel subsoil, and was naturally drained; the water did not stand on the surface for any length of time, even in very wet weather. I was confident that want of drainage had nothing to do with it, and that the fault was in the cultivation. Young trees seldom do any good planted amongst old ones, even if the soil has been well dug up and enriched with manure where the roots are to be placed. They require a wider and better field for their ramifications. I found I had to make gravel paths as well as fruit borders, and as most of the old trees were on the wane, and the young ones of but little value owing to their cankered state, it was thought best to remove them. But they were not all removed at once, as it was necessary to keep up a supply of fruit for household use. A space about thirty feet wide was lined off through the whole length of the garden, and was cleared of all trees and bushes. In the middle was a space six feet wide for a gravel path. The borders on each side, about twelve feet wide, were trenched, where possible, two feet deep, and we found the gravel cropped up in places within a foot of the surface. Where this was the case the gravel was taken out and used to make the path, the soil from the path being used to fill up the space from whence the gravel was

removed. A good dressing of decayed farmyard manure was worked in with the operation of trenching, and as we could obtain good clayey loam, a barrow-load of it was spread out over two square yards, and six inches below the surface; a thin layer of decayed manure was placed on the ground before the loam. This was easily done as the work proceeded; one man could wheel in the loam and manure to two at work trenching.

When the work was finished we had a good gravel path with box edging on each side, and the borders, through the trenching and manuring, were about eight inches higher than the surrounding ground level. I had to plant the trees soon after the trenching was finished; they were apples, pears, and plums, on various stocks and in considerable variety. We planted them but six feet apart at first, and when they were planted a portion of good decayed turfy loam was placed round the roots. With this treatment, as might be expected, the trees made good clean growth even the first year.

As we manured rather too heavily by placing in two layers of fat stuff, I thought it best to retrench the ground the next year, lifting the trees as the work proceeded. I found they had made a mass of fibrous roots into the loam, and when the trees were replanted again quite another barrow load of loam was placed round the roots, but no manure this time. However, round the roots of each tree some decayed frame manure was placed to keep the frost from them.

The trees made good clean growth again, and formed plenty of blossom buds. But I found six feet was too close even for apple trees on the Paradise stock, and they had ultimately to be removed from nine to twelve feet apart. In the course of the next ten years other borders were made, and in some cases the trees which were too close to each other were thinned out to furnish them. Many of the old cankered trees remained in proximity to the young ones for quite ten years, and with some two or three unimportant exceptions none of the young trees cankered. This shows, I think, if the disease had been caused by insects they might have travelled from the old diseased trees to the young ones. It was some seven or eight years before any canker appeared, and then only on Dumelow's Seedling or Wellington. These trees were lifted, the canker cut out, and they were replanted again with fresh loam under and above the roots. The cut out portions soon healed over, and I saw no more of the disease.

The object I had in view was to encourage the roots up to the surface, and to keep and feed them there. The entire border quite close to the surface was full of roots, because it was not dug over, but merely scratched with a fork or hoe; and during winter and summer there was a thin layer of manure over it. Within the borders were the kitchen garden squares, well manured, to be cropped with vegetables, and the roots ran into this freely.

We were well within the London fogs, being less than seven miles from the Bank of England. In our new garden not much further out we had to do the same sort of work, but the soil was much better, being a medium clay of considerable depth, and nothing more was necessary than to trench the ground twice over in order to incorporate the top and bottom soil well together. We had to drain it, and find a good outfall for the water. In such a case the drains should be about six yards apart.

I have brought this subject forward as much in the interest of amateurs who own small gardens, and who do most of the work themselves as a relaxation from sedentary occupations, as in that of gardeners. It is quite true that some classes of soils are more suitable to fruit culture than others, but my experience is that some soils are condemned when neither the soil nor the climate, but the culture alone is to blame. Only the other day I met a person who has several hundreds of fruit trees in his garden, most of them young ones, and a considerable portion are showing canker on the larger branches. I examined the soil, and found that it had not been broken up more than ten inches deep; and, further, all sorts of vegetable crops were planted close up to the trees. This system of culture can satisfy no one, and it cannot be profitable. I fancy many good gardeners will bear me out when I say that want of preparation of the soil, and subsequent neglect of the special requirement of each class of trees, is the sole cause of canker.

Having found a cause, I would suggest the remedy.

In the first place, it may be remarked that heavy clay soils nearly always require to be drained, and a free outfall provided for the water. Three feet depth of drains is sufficient, with a main drain at the lowest part of the garden three feet six inches deep.

Secondly, trenching, or at least stirring, the soil to a depth of about two feet is necessary. But I would not invariably throw the subsoil up to the surface, but would always stir up the bottom to the depth of eight or nine inches with a fork; and if the soil could be trenched twelve months before planting all the better.

In the third place, good healthy trees should be selected; they ought to be carefully lifted, and planted as soon afterwards as possible. Care must be taken to keep the roots in a moist state from the time they are lifted until they are again in the ground. Spread the roots out carefully when planting them, and work the soil well in amongst them. Trees on the free stocks should be planted the same depth as they were before. Those on the Paradise and Quince stocks, or, in fact, any dwarfing stocks, should be planted to the union of the stock and scion. It is also of great advantage to the trees to have a mulching of decayed manure around the roots after planting; and if they are exposed to high winds, they ought to have some artificial support until they are well established.

Lastly, as to the pruning and training. I seldom do any pruning in winter. It is a more pleasant occupation in summer, and is a very simple operation, merely consisting in thinning out the young wood when it is too much crowded, and pinching off the points of any vigorous young growths that are likely to run out too far for the others. If they grow too much it is easy to dig round the circumference of the roots, and to cut underneath to sever any roots that are running directly downwards. This will be enough to throw any tree into bearing. To allow a fruit tree to form a thicket of wood in the summer, and then to cut it all off in the autumn, is the right treatment for a pollard-willow, but will not do for fruit trees of any kind. There should be more reverence for life in the mind of the pruner, and then such reckless pruning would not be possible.

It is quite time that a better system of fruit-tree culture should be adopted in small as well as in large gardens. Why should amateurs purchase fruit when they can grow it themselves, and have all the pleasure as well as the profits? It is useless to sit down and blame the climate, the soil, or anything else, when the real cause is a bad selection of varieties, or bad cultivation. Let the old worn-out cankered trees be rooted out from old gardens, and their places be filled with approved sorts likely to do well in the neighbourhood, for each district has its special varieties.

Preparation of the ground by trenching and manuring is necessary, and whether the soil is light over gravel or a clay soil over heavy clay, the results will be satisfactory, and justify all the expenditure.

ENEMIES OF THE APPLE AND PEAR.

By Mr. J. FRASER, F.R.H.S., Kew.

Both animal and vegetable enemies are numerous, but the former probably outnumber the latter considerably. They range from the minute gall mites, about one-hundredth of an inch in length, up to birds, hares, rabbits, and cattle. Vegetable enemies are, however, none the less destructive sometimes, and certain kinds are very difficult or impossible to exterminate on account of their microscopic size, and more especially when hypodermal, that is, living beneath the epidermis of the host plant.

CANKER.

All diseases are attributable to some cause or other, even if it is difficult to detect what that may be. Science may yet determine the true cause of canker, even if it fail to suggest a cure.

That canker is something of the nature of a parasite, we have evidence in its spreading and attacking previously uninjured tissue.



C.B.P

CANKER IN APPLES, SHOWING THE PRESENCE OF A FUNGUS, *Nectria ditissima*.

Decay itself is brought about by the action of living organisms on matter that is already dead, and effects the changes that crumble organic substances into dust. There is some truth in the statements that cold and undrained soil, severe pruning, extreme variations of temperature, late growth, and unripened wood, give rise to canker, just as bad treatment will undermine the constitution of a human being and prepare the way for disease. The real enemy does but take advantage of the weakened state of the victim. Some varieties of apples and pears are more prone to canker than others, and especially in some soils that may be cold, undrained, or are underlaid by a gravelly subsoil. Here, again, we may point to the natural constitution of the trees in question. Great improvements have been effected by drainage, by ameliorating or supplying fresh soil, all of which point to the fact that more or better nourishment is needed to enable the trees to make healthy growth in order to contend against an invisible but powerful foe. The baneful effects of canker may to a great extent be

evaded by planting in good well-drained soil, and by superior cultivation. It is not sufficient that the right materials are present in a soil, but they must also be in a soluble condition, so that the roots may be able to appropriate them. Good tilth promotes early vegetation, an early maturation of the wood, and by imparting a greater constitutional vigour to the tree enables it the better to ward off disease even when accidentally or otherwise injured. With this preliminary I proceed to classify the other enemies.

ANIMALS.

Numerous as these are, they may be roughly divided into a few groups, such as insects, birds, and other animals. Kaltentbach, a German entomologist, says that 183 species of insects prey upon the apple, of which 115 are lepidoptera, *i.e.* moths and butterflies, 32 beetles, 20 aphides, and 16 others belonging to different families. Of these I can only mention a few of the more important or destructive in the limited time at my disposal, with the view of directing attention to the fact that their successful destruction can only be effected by proceeding against them by intelligent and scientific methods. Haphazard raids are mostly useless and attended by failure, while passive and indolent indifference is but too plainly evident in many a neglected old garden or orchard. Scientific research is frequently sneered at by the practical man, but until the habits and life-histories of some particular foes are thoroughly investigated there can be no intelligent, sensible, or effectual attack made upon them.

The Apple Grub (*Carpocapsa pomonella*) is the larva of a small moth which lays its eggs in the calyx of the young and growing apple in the month of June or July according to the season. The larva when hatched is white, with a black head and neck and four rows of black spots. It gnaws its way down the fruit, keeping clear of the core till it reaches the rind, which is pierced to permit the escape of its excreta. When nearly full grown it sometimes pierces the core and feeds upon the pips, generally causing a great number of the fruits to fall prematurely. Soon after this it leaves the fruit, and finding a secure retreat in crevices of the bark or other hiding-place, commences to spin itself a cocoon, and after resting a time becomes transformed into the chrysalis state, which it retains till spring. Soon after completing their development, the moths pair, and egg-laying commences as formerly.

The grubs may be trapped in great numbers by tying bands of hay or straw round the trunks of the trees so as to afford the grubs a place of shelter in which to form their cocoons. Collect the bands in autumn and burn them. All fallen apples should be assiduously collected and given to pigs or destroyed. The

Codlin Grub trap is a special structure consisting of several boards of a convenient length fastened together in the middle,



THE APPLE GRUB AND MOTH.

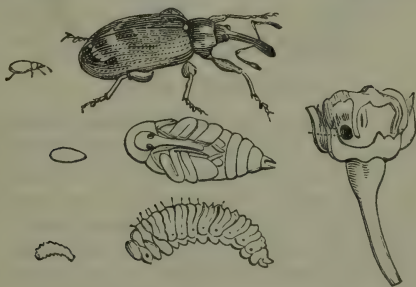
and the respective pieces kept apart by means of thin laths. The grubs readily take to this, and from four to eight hundred traps can be examined by a man per day and the grubs collected in a vessel.

The American Blight is the work of *Schizoneura lanigera*, an insect closely allied to the aphid or greenfly of gardens, but differing in the absence of the "honey-dew" secreting glands



INSECTS CAUSING AMERICAN BLIGHT.

possessed by the latter. When plentiful it proves very destructive, causing swellings of the external tissues resembling cancerous wounds. The insects take up their abode in the crevices of the bark, from which they are difficult to eradicate. Soft soap, Gishurst compound, or, better still, petroleum, will effect



THE APPLE WEEVIL.

a cure if rubbed into the crevices of the bark every time the insects make their appearance during the course of the season. Petroleum is the most effectual, and should be applied by means of a hard brush, such as is used by painters. The insect hibernates in the soil during winter if the trunk of the tree does not

afford sufficient accommodation, and it may be destroyed by the application of quicklime a little beneath the surface. The Apple Blossom Weevil (*Anthonomus pomorum*) is a beetle, the female of which lays her eggs in the bloom buds of both apple and pear trees, and the grub, when hatched, eats the stamens and pistil, rendering them completely useless. Egg-laying lasts for two or three weeks, during which time great numbers of the weevil may be caught by shaking the tree, beneath which a white cloth has been spread, as they drop down on being alarmed. The weevil attains perfect development in a month's time from the laying of the egg, and feeds on the foliage during the rest of summer. It hibernates in the same way as the American Blight, and similar methods for its destruction may be employed. Bands of tarred cloth may also be put round the trunk of the trees affected to intercept and catch the females on their way from the ground to the tree, as they seldom fly. Good husbandry also applies here; rubbish of all kinds should be rigidly cleared away, and crowding of the trees prevented.

The Apple Mussel Scale (*Aspidiotus conchiformis*) is allied to the true scale, and attacks the bark of apple and pear trees alike,



APPLE MUSSEL SCALE.

affecting them in a similar way to that of the American Blight. The eggs are never laid, but hatched in the body of the mother when she dies. The latter is wingless, while the male is minute and winged. If the scale is numerous the tree becomes unhealthy and unfruitful. The scale is brown, and in shape like the half of a mussel shell. Scrub the branches with a hard brush just kept moist with petroleum, and persevere for two, three, or more seasons, as the scale is most difficult to eradicate when once it obtains a footing.

Gall Mites (*Phytoptus pyri*) are small acari about the one-hundredth of an inch long by one five-hundredth broad, that produce blisters on the pear leaves. The tissues of the leaves are torn asunder, forming large cavities, the cells often forming strings holding on by their ends. There is a small opening on

the under surface for the egress or ingress of the mites. My specimens of blistered leaves are from Kelso, the first record to my knowledge of gall mites in Scotland. I received them in August last. The mites hibernate in the buds of the tree in winter, and are most difficult of extermination. Collect all



PEAR MUSSEL SCALE.

affected leaves in spring, when the mites are still in them, and burn them. When once badly affected the trees continue so from year to year, and unless they are valuable kinds should be grubbed up and burnt to prevent the pest from spreading. Plant healthy trees in their place. I had specimens from another source affected with gall mites, mussel scale, and apparently canker as well.

Slugworms are the grubs of certain sawflies, differing in colour, and in the nature of the secretion covering their bodies; but the slugworm proper is the grub of *Eriocampa limacina* (or the *Selandria cerasi* of Miss Ormerod). It derives its name from the black slime covering its hairy body till the last moult, when the resinous dark coat is thrown off. The grubs have large heads, and in the earlier stages, when slimy, bear considerable resemblance to a black slug. Hence the derivation of the name slugworm. I collected my specimens on pear trees at Holwood, Kent, the other week. Autumn is the time they make their appearance. They are very voracious, and eat away the upper surface of the leaves, which become brown and ultimately drop, causing the trees to become unhealthy. The fruit was affected with the fungus which causes cracking, were very much split, and entirely useless. The slugworms under notice attack most

of the fruit trees belonging to the natural order *Rosaceæ*. They may be destroyed with hellebore powder mixed with water, and applied through the rose of a watering-pot. As they hibernate



SLUGWORM OR SAWFLY.

in the first three or four inches of soil, that depth should be taken off and burnt. Both grubs and flies are extremely sluggish, and the latter may be shaken down on a white cloth and destroyed.

BIRDS.

The feathered enemies are more easy to deal with than any of the above; but, with the exception of the bullfinch and the sparrow, I would not advise the shooting of them. Even the latter has much to recommend him to mercy. If the birds are killed wholesale we destroy the balance of nature, and get afflicted with a plague of insects far more difficult or impossible to exterminate. The gun should be employed during the ripening of the fruit to scare, not to kill. The warning cry has been heard from many an orchard in Kent during the past summer. Of the larger animals, rabbits and hares are the most destructive during severe weather. They soon destroy an orchard by barking the young trees. To prevent injury, protect the stems of the trees with branches of blackthorn or furze; but the most sure and effective plan is to use a guard of wire netting. Tar, grease, and oils should not be employed, as they are injurious by stopping up the air passages in the bark.

VEGETABLE ENEMIES.

These are of two kinds, namely, parasites and epiphytes. The former are the most to be dreaded, since they attack and destroy the living tissues of the host plants by feeding on their

substance. Parasites may again be divided into those of a fungoid nature and those that are green.

Mildew affecting the apple is a white mould belonging to the group *Erysiphe*, and in this, the early stage, it is referred to the genus *Oidium*. It is one of the most easily destroyed of parasitic fungi, from the fact that it lives on the surface and does not penetrate its host. Sulphur alone, or various preparations

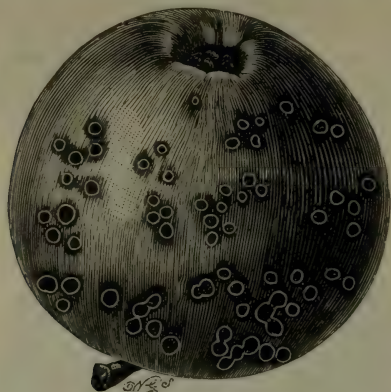


MILDEW ON APPLES.

containing sulphur, will completely destroy the fungus. Should a large number of trees in a garden or orchard become affected, the application of sulphur would be a tedious and costly operation; but if a few isolated trees only are attacked, the remedy is more easily applicable.

Cracking is caused by *Cladosporium dendriticum*, a too widely prevalent fungus, that grows on the leaves, young shoots, and flowers of the apple, often preventing the formation of fruit. In severe cases the latter becomes partially or completely covered with blotches, crippling and preventing it from attaining full size, and in all cases the fungus reduces the market value of the produce by disfiguring or causing it to crack. The disease commences as black spots, branching from the centre like a small tree, while on fruit the patches soon become irregularly rounded, with a depressed black spot in the centre, surrounded by a white line, and that again by a black border. The pear is attacked in the same way by a variety of *Cladosporium dendriticum*, generally known amongst fungologists under the name of *Cladosporium pyrorum*. No remedy is known, and means to prevent its spreading must be adopted by destroying badly affected trees and fruit.

Here again good cultivation greatly tends to palliate the evil by encouraging a healthy vigorous growth of the trees. Marie Louise



CLADOSPORIUM ON APPLES.

and Louise Bonne of Jersey pears are very subject to it, and should not be planted in places infested with the disease.

Rust on the pear is caused by *Ræstelia cancellata*, as well as some other parasitic fungi. The *Ræstelia* produces rugged swellings on the leaves, the blotches finally becoming red, and showing themselves on both surfaces of the leaves attacked. It is believed to be an early stage of *Gymnosporangium Sabinæ*, which completes its life cycle on *Juniperus Sabina*. As in the rust of wheat, there is an alternation of generations on different host plants, and described as heteræcism. It is not common in England, is not, I believe, recorded from Scotland, but is very destructive on the Continent. Hand-picking the leaves as the spots make their appearance, and before the spores are shed, is the only remedy, and no juniper bushes should be allowed to grow near them. On a large scale it is more profitable to uproot badly-affected specimens and plant afresh.

Mistletoe in this country is the only chlorophyll-bearing parasite that need be noticed. It is very injurious to orchards in Herefordshire from its great prevalence, and prevents the branches infested by it from thickening properly below the union of the parasite with them, ultimately causing the trees to become stunted and unproductive. Cut down the mistletoe about Christmas, when a market will be found for it to defray the expenses of the operation.

Epiphytes, such as lichens and mosses, can be removed by scraping or scrubbing the bark of the trees, or they may be destroyed by sulphuric acid much diluted in water. The evil is but half remedied, however, and the lichens will soon grow again

unless measures are taken to remove the cause by draining or otherwise ameliorating the land, as the case may require, and so induce a healthy, vigorous growth, thereby enabling the trees to thrive, increase in thickness, and throw off the old bark.

DISCUSSION.

Mr. ROUPELL noticed that Mr. Fraser had omitted to mention the Lackey moth, which was the parent of those nests of brownish maggoty creatures called social caterpillars, which had lately been one of the greatest possible plagues in his neighbourhood. He had spent three days picking these pests off his trees, but his neighbours, who had not done the same, had no leaves left at all on their trees, and consequently no fruit. These creatures could only be removed by hand picking. As to sparrows, they were very abundant near him, but they never did the least harm, because poultry yards were so numerous, and he never knew a sparrow touch fruit as long as there was corn to be got or an old bone to be picked. He should like to caution gardeners against planting potatoes too near to apples, as he had a very strong fancy that the potato communicated fungoid diseases to fruit.

Mr. CLARK said that with the Lackey moth grub he had found it an excellent plan to put a little powder into a gun and fire it at the colonies of social caterpillars. The shock seems to alarm them, and they at once throw themselves on to the ground, when they can be easily crushed with the foot. With regard to the gooseberry caterpillar, he had seen whole gardens absolutely cleared of every leaf they possessed, and he was confident that the best remedy was to get up early, while the dew was yet on the leaves, and dash a mixture of soot and lime both over and under the leaves. This he had always found most effective.

Mr. PEARSON thought the shooting at the caterpillars would be a very long business. He found that both with the socialists and the gooseberry grubs one good syringing with soft soap and quassia got rid of them all. He did not think that the cracking of apples and pears was caused by fungoid growth, but by cold, and hence a reason why the later varieties always suffered the most. He imagined the cracks caused by cold formed convenient resting places for fungus germs, where they could grow and develop at leisure.

Mr. R. DEAN said he must prefer a very strong bill of indictment against sparrows. He had fed them and given them water, but they seemed to him thoroughly heathenish birds, quite unaccustomed to do unto others as they were done by, for they never lost any opportunity of attacking his fruit; nor were they even content with the fruit, for this year he had an Easter Beurré

tree full of bloom, and the sparrows tore every blossom to bits with their beaks.

A gentleman asked whether the use of petroleum for removal of American blight and such things was likely to injure the trees?

Mr. FRASER replied that petroleum in very small quantity did no harm to the trees, but care should be taken that the brush was only just moistened with it. He considered helebores powder dusted over the leaves when damp was the best cure for caterpillar.

VARIETIES OF APPLES FOR SUSSEX, AND THEIR CULTIVATION ON HEAVY SOILS.

By Mr. JOSEPH CHEAL, F.R.H.S., Crawley.

As the subject of supplying our own markets with fruit grown at home is rightly claiming much attention, it is important to know where to plant, how to plant, and what to plant; and in this paper I will try to give in compact form a few facts relating to apple culture upon heavy soils that have been gleaned from a number of years of close observation, in the hope that it may be a guide and a warning to those who may be entering upon this industry without much practical knowledge of the subject.

In Sussex and the southern parts of Surrey the soil consists almost entirely of the wealden clay, and this being of a somewhat close, retentive nature, it is necessary to exercise care in the selection of the varieties best suited to the district to ensure the best results.

In the following selection I am supposing that the object is the growth of apples for profit, therefore I mention only those that are found to make vigorous, healthy growth, produce good and regular crops, and of such a quantity and size as to command a ready sale in the market.

In the first place I will name twelve varieties that can be recommended for growing as orchard standards, placing them in the order of ripening:—

Duchess of Oldenburg.—A very handsome fruit, striped with crimson, and carrying a delicate bloom. It is an early and abundant bearer, a moderate grower, with a somewhat spreading habit.

Worcester Pearmain.—A medium-sized, conical, and very handsome apple, covered with bright crimson. Useful for kitchen or dessert, a good cropper, and its showy appearance commands for it a ready sale. Tree, an upright grower.

Ecklinville Seedling.—A large and fine apple, flat, and slightly angular, a greenish yellow, changing to pale yellow, and dotted with brown specks; its only fault being that it is very soft and requires careful packing for market. Tree, a vigorous grower, with a somewhat erect habit.

Pott's Seedling.—A large angular shaped fruit, slightly flattened, skin pale yellow. A very free cropper. Tree, a good grower, with a slightly spreading habit.

Warner's King.—A very large and fine apple, round, and somewhat flattened, skin pale green; tree, a vigorous grower, with very large foliage, and, considering the size of the fruit, a free bearer. The tree has a spreading habit.

Golden Noble.—A large and, as its name implies, a truly noble apple, round and even in shape, with a beautiful clear yellow skin. Tree, a vigorous grower, with a spreading habit.

King of Pippins.—A well-known dessert fruit of medium size and good quality. Tree, a vigorous grower, with an upright habit, a free and certain cropper, and when well grown one of the best for market purposes.

Cox's Orange Pippin.—The king of dessert apples, medium in size, rich in colour, luscious and juicy in texture, delicious in flavour; there is no apple in the wide world that can equal it in quality. Tree, a moderate grower, with a spreading habit.

Blenheim Orange.—The king of apples when grown as a standard, the large fruits being suitable for kitchen, and the small ones for dessert. The greatest drawback to this variety is the length of time that elapses before it comes into bearing, eight or ten years being the usual period: a long time for this age of speed. But it is one that we cannot do without, and can afford to wait for, there being plenty of others which step in to supply the gap during the period of probation. Tree, a vigorous grower, with a spreading habit.

Winter Quoining or Ducksbill of Sussex.—A medium-sized conical fruit, covered with deep crimson. It is grown largely in Sussex, especially by cottagers and small growers, and called by them the Winter and the Scarlet Pearmain. The tree has a spreading habit and crops well; a valuable late apple.

Wellington.—A large and well-known fruit, one of our most valuable kitchen apples for late use, and coming in as they do when fruit is scarce, good samples command high prices. Tree of a spreading habit and fruit in season from November to April, and even later when well kept.

Norfolk Beefing.—Medium size, round and flattened, colour a very dull deep red. Tree, a vigorous grower, with an upright habit. Valuable on account of its extreme lateness, being in use until June.

Beyond the foregoing twelve varieties, I may mention a few more as a supplementary list of sorts that also do well as stand-

ards: Annie Elizabeth, Dutch Mignonne, Schoolmaster, Yorkshire Beauty, Nanny, and Claygate Pearmain. Golden Knob also does well, and is considerably grown, and it realises a high price; but the fruit is too small to recommend.

I must not pass the standard trees without mentioning a variety that is grown more largely than any other in the northern parts of Sussex and south Surrey. I allude to the Forge. The tree thrives remarkably well on the clays of the district, making short but sturdy and healthy growth. It crops enormously, but almost invariably on alternate years only when left unpruned. The fruit is then very small and almost worthless. Trees, however, that are pruned and well thinned crop more regularly and bear larger fruit, the quality being excellent. But they must be grown considerably above the usual size to be of any value for market.

Now I will give a selection of twenty-four varieties suitable to grow in the pyramid or bush form between orchard standards. Time will not permit me to do more than mention the names, which are given in the order of their ripening: Professor, Keswick Codlin, Lord Grosvenor, Golden Spire, Lady Sudeley, Manks' Codlin, Ecklinville, Yorkshire Beauty, Worcester Pearmain, Pott's Seedling, Stirling Castle, Frogmore Prolific, The Queen, Northern Dumpling, Loddington, Lord Derby, New Hawthornden, King of Pippins, Peasgood's Nonesuch, Cox's Orange Pippin, Ribston Pippin (on Paradise), Lane's Prince Albert, Horner's Pearmain, and Duke of Devonshire. I may add that Lord Suffield is not good on heavy soils.

From this list may be selected varieties for early, mid-season, or late use. Cooking or dessert fruit according to requirements.

PREPARATION OF SOIL FOR PLANTING.

As my paper deals with heavy soils, I will presume that it is intended to plant such land with apples. The question is asked by those not much acquainted with the subject, What preparation is needed to plant?

This much depends upon the state of the ground, as to the cultivation and manure it has received, the state of the drainage, and the nature of the preceding crop.

The point of the first importance is the drainage. The best is undoubtedly pipes, the depth and distance apart of these being regulated according to the soil. Straw or bush drains are also sometimes used, and last for many years in a clay soil, but pipes will be found the most economical in the end.

As to the preceding crops, one of the best preparations for fruit planting is to grow a root crop on land that has been deeply cultivated and well manured. The ground is then left in a mellow and friable condition, with the remains of the manure

left in the soil, and left in such a condition that it is in the best possible state for the roots to assimilate. Land that has been so dealt with the season previously will require but very little other preparation for planting.

Should, however, the land to be dealt with be a clover lay or following a cereal crop, I would advise that it be well broken up and pulverised. And it is most important that this breaking up should be done to an even, uniform depth. If it has to be done by hand, let it be double dug, the bottom spit being merely turned over or loosened with a fork, and on no account bring the subsoil to the top.

If the work is to be done by horses, it may be done by turning a deep furrow by an ordinary plough, followed along each furrow by a subsoil plough.

But the best and most economical way where a considerable quantity is to be dealt with is to use the steam cultivator. This implement passed twice over the land in opposite directions, to a depth of fifteen to eighteen inches, leaves the soil in a light open condition, allowing free filtration of water, a quick passage through the soil, followed by the air with all its fertilising and beneficial effects. Three years ago we prepared in this way a five-acre field of our own for planting with apples as a permanent orchard. The subsoil was a somewhat heavy clay, but the trees are thriving well, and we have this autumn been trying a new steam digger, which promises to be a useful tool for breaking up heavy land.

PLANTING.

The ground having been prepared for the reception of the trees, proceed to plant by digging very shallow holes, and placing the tree almost on the surface, bank up the soil round the roots. This allows a space of loose aerated soil below the tree, in which the roots can grow and spread laterally, thus encouraging the development of fibrous roots near the surface, discouraging and delaying the tree from sending down tap-roots into the cold and ungenial subsoil, with the usual, and as regards many varieties the certain, result of unhealthy growth, canker, and other diseases.

The foregoing remarks apply equally to the ordinary standard or to pyramid trees upon the free stock. Some varieties, however, that will under any treatment persist in penetrating the subsoil to their own detriment and destruction, may be successfully grown upon the Paradise stock, when they will not only fruit early, but continue to flourish in health and fruitfulness for many years.

Where it is required to plant standard trees on grass land without breaking up the turf, there is no alternative but to dig

holes. In this case be careful to see that a drain is laid from the bottom of each hole to ensure an escape for water and to prevent it from standing in the hole.

MANURE.

Land that has been prepared by a heavy dressing of manure for a previous crop will not require any more when planted; but if it requires manure, apply in small quantities to the hole, thoroughly mix with the soil, and after just covering the roots with soil apply another small quantity of manure, and then cover with the remaining soil.

As to the quantity required: but very little is needed at planting, and it is better to err on the side of too little than too much.

AFTER TREATMENT.

Little can be done towards ground cultivation of ordinary standard trees on grass beyond periodically top-dressing with stable manure, bones, rags, &c., or fattening sheep on the ground. This on most soils, however, is found necessary and very beneficial.

I would, however, strongly urge the benefit derived from occupying the whole ground with trees and keeping the surface open by top cultivation. If treated thus on heavy land the trees will make more growth, produce much finer fruit, and keep clear from lichen, &c. Whilst the trees are small, the cultivation may be done by horse, either with the horse hoe or shallow ploughing. After the first two or three years, however, the growth of the trees will prevent this. It must then be done by hand.

Manure should be applied at least every alternate season, and should be spread over the surface, and be forked in during the winter or early spring cultivation.

THINGS TO BE AVOIDED.

It is very desirable to avoid digging holes in unbroken ground for the reception of young apple trees. Such holes are very liable to hold stagnant water, and to become mere graves for the trees. If possible the holes should not go below the depth of actual cultivation.

Above all things avoid planting too deeply.

Avoid the use of the spade in digging too deeply near the trees, as great damage is sometimes done by cutting the fibrous roots. It is therefore safer to use the fork.

CONCLUSION.

To those who may be contemplating fruit-growing upon heavy soils who may not have much practical acquaintance with

the subject, I would remind them of the words "In the multitude of councillors is safety;" but, on the other hand, the more homely saying equally applies, that "Too many cooks spoil the broth." In other words, hear all sides, get all the advice that you can, weigh the evidence, arrange your plans, and then proceed according to your own judgment and common sense.

Do not imagine that success is gained by careful preparation and planting alone, but ever bear in mind that fruit trees require continual watching as to their varied needs, according to seasons and soils, and the ravages of insect pests. But wherever vigilance, common sense, and persevering labour are bestowed upon apple culture, even upon some of the poorer and heavy land it will be found a safe and most profitable industry.

DISCUSSION.

Mr. HEALD said he was convinced that apple-growing was profitable, and he instanced two cases in Sussex where the farmers had made 13 per cent. after all expenses had been paid. Even with the large number of comparatively worthless sorts that were grown a profit was realised, and if people would only plant such good sorts as had been mentioned the profit would be ten times as much.

Mr. IVATT asked whether it was better to plant varieties to sell straight off the tree or sorts that would store?

Mr. CANNON replied that there was a great loss in growing such sorts, as all came in at one time. In the early part of the autumn you may see every little shop-window full of English-grown apples, but after the early part of November all the fruit to be seen was foreign; he, therefore, advised to grow several varieties, and particularly such as prolonged the season. A few bushels of late apples would in their season sell for more money than many bushels of early ones when the markets were glutted.

Mr. CLARKE said he had attended Covent Garden Market for the last thirty years, and the apples that always fetched the most money were Manks' Codlin, Early Julien, and Wellington. Of Manks' Codlin he could always sell any quantity, and of Early Julien also. Of plums he found Pond's Seedling the most profitable, it would generally sell for 18s. a bushel, and that was indeed making money. He always took his fruit to market himself, and never employed a salesman.

Mr. CHEAL said that the question of planting early or late sorts was one which each man must determine for himself, according to his own market. It seemed, however, in reason to plant a proportion of early and late—the early to catch the market before the Americans came, and the late to keep up a supply when the Americans were gone; but probably the late ones, if carefully stored, would give the most profit.

RENOVATION OF OLD AND FORMATION OF NEW
ORCHARDS IN THE WEST MIDLANDS.

By Mr. W. COLEMAN, F.R.H.S., Eastnor Castle Gardens.

Five years having passed since the R.H.S. inaugurated the first comprehensive Apple Conference, the present Council has wisely decided upon testing the result of that important step by again calling together the friends of Pomona. A small minority in 1883 thought the exhibition of thousands of plates of apples would not benefit the growers, but overlooked the fact that these exhibits would bring together, not only the growers, but the consumers also. Since that time the growers' prospects have not improved, owing, they say, to the prevalence of low prices brought about by gluts and foreign competition. Buyers, on the other hand, say the supply is unevenly and irregularly distributed, and the price is too high when they purchase from the retailer. Growers say fruit culture will not pay until the land each man holds or occupies is as good as his own, or let to him on a very long lease indeed; but present owners of the soil somehow do not seem to see the force of their argument, consequently the most important work the present gathering has before it is the framing of a scheme of open markets in which consumers can buy first hand at fair remunerative prices. This is all very well, but supposing each householder is in a position to buy apples, say, from day to day, where are those apples to come from? Why, we must import them. Actually, we must trust to the Colonies for the produce of a tree which is indigenous to our soil, whilst thousands of acres of land capable of producing the finest fruit is going out of cultivation. To the R.H.S. should attach the honour of taking the initiative in working out this problem, but before the body can move, we must learn from reliable men the progress which has been made in the great fruit-growing districts. Living as I do in the county of Hereford, boasting its 27,000 acres of orcharding, where, in days gone by, thousands of tons of good fruit were lost, wasted, or converted into indifferent cider, I am able to form a pretty correct opinion of our own progress, and although less rapid than I could wish, I may say it is fairly satisfactory. Cider drinking amongst the working classes since I first knew the county has gradually decreased, consequently small parcels of the rosy Tom Putt and other useful apples, alike good for cooking or vintage, are now stored for daily use by all the members of the grower's family. If not wanted, then they are sold to dealers, who make a profit, for conveyance to retailers, who also make another profit, and that a heavy one, from their customers. Although a slight step forward, this state of the case is not quite satisfactory, neither will it be until a

powerful fruit-growers' association, which should be the outcome of this Conference, has established a network of markets in all provincial towns as well as in London—markets in which producers, as in all parts of Paris, can meet face to face with consumers without the aid of so many middlemen. In fruit-growing counties like Hereford, Worcester, Gloucester, Kent, Devon, and Somerset, these local markets should be well supported, as we gather from statistics that three-quarters of a million of money is sent out of England annually for apples alone. If landowners, hitherto blind to their own interests, and legislators now take up the matter, I see no reason why growers should not go forth to the production of an article which the public must and will have, and so keep the money at home. Our climate is all that can be desired for the growth of fresh, crisp fruit, not quite so highly coloured or so large as picked samples from the Colonies, but large enough to command top prices when well grown and packed, and properly marketed. There must be no shaking from the trees, but the cream of the crop must be hand-picked, and honestly packed as firsts and seconds. The residue or refuse, which added to the best would increase expenses and pull down prices, would then remain at home for various purposes.

Mr. Knight, the great physiologist and hybridist, who worked so much in Hereford and Salop, proved by analysis that some soils, even in these favoured counties, were preferable to others for producing apples of dense gravity and full of saccharine matter. The late Dr. Bull, of whom Hereford should be proud, following in his wake, corroborated all that Knight had said, proving, I think satisfactorily, what past generations of shrewd men had found out for themselves, both as regards the quality of the fruit and the constituents of the soil which should be chosen for apples, also for pears. The conclusions at which they arrived were these: The light thin soils will not grow the best apples, therefore, those who would plant a successful orchard must choose a deep stiff sandstone loam if they have the opportunity of doing so. All the orchard land in this county is not alike good; indeed, some is very bad, but the soil here, as in Devonshire, which produces the best fruit, owes its fertility to the plentiful supply of lime from the marl or cormstone; to its great depth and sustaining nature. Scientists who will may peruse the first part of the "Herefordshire Pomona," or they may follow Mr. Rivers through his exhaustive address delivered at the Crystal Palace, but my remarks, necessarily brief, will guide plain practical planters to the best spots for new plantations.

Having been honoured by an invitation to contribute a short paper upon the Apple, I have determined to confine myself to the West Midland orchards, in which, I am pleased to repeat, some progress has been made since the first Conference was held in 1883. Draining, grubbing, grafting, and planting are still going

on, but much remains to be done before we can invite inspection. Although the apple is a long-lived tree, and perfectly hardy in all its parts save its flowers, the occupants of many of our oldest orchards, crippled by age, bad usage, and neglect, are past recovery, and should be cleared away, but the ground they occupy should not be replanted if better or equally good sites can be found for new plantations. Other orchards again, containing thoroughly sound young trees, although of inferior sorts, after the grubber's axe has passed over the land, may be converted by grafting and resuscitated by draining and top-dressing. Some of our oldest orchards, which date back to the Wars of the Roses, contain a great number of wildings or kernel fruits of no value to the owners even, whilst younger plantations are crowded with healthy, vigorous trees, at one time supposed to be Norman, but now proved to be English seedlings, no better than the stocks used in large nurseries. Upon the first I would not spend money, as they are too old for grafting, too old to pay rent, too old for anything save loss and disappointment. The second I would behead and regraft with choice varieties which have been proved in the locality. Confining myself to old orchards now existing or languishing in the Western Counties, I may close my remarks upon this head by saying: cut down all useless trees, thin out the heads of those worth keeping; cleanse the branches and stems from moss and insects; regraft sound, healthy trees into good market sorts, and see that the drainage is satisfactory. I will not presume to inform practical men who may deign to read my remarks that sound, deep, naturally-drained orchards are better than others which require artificial treatment, and that a certain quantity of moisture in the soil is absolutely necessary, but on no account must it be stagnant. All gardeners are well acquainted with the fact that soils too dry produce fruit that is small and mealy, whilst water-logged soils are several degrees colder than others of similar texture that are free from this root-chilling poison. They know, moreover, that warm summer rains run off the surface, whilst the sun acts very slowly in raising the temperature of the wet subsoil, in which deeply-seated roots soon perish, and those nearest the surface are little better off, as they do not commence fresh action much before Midsummer. Drainage, all good cultivators assert, is the first essential in the preparation of new orchards or in the renovation of old ones, and why? Well, simply because the removal of stagnant, if not putrid, water and the introduction of fresh air raises the temperature of the soil from three to five degrees, a condition which not infrequently forms the dividing line betwixt success and failure.

So far my remarks have been confined to old orchards, planted haphazard upon all sorts and conditions of badly prepared land, as well as in unfavourable situations. The best of these may be

retained for a time, upon the principle that half a loaf is better than no bread; but the majority of them must go, and young ones must spring up before we can hope to realise an average £10 an acre, or compete with the colonists in our own markets. Some years, as many present know, have passed since horticulturists commenced agitating, but the good seed which was intended to put three-quarters of a million of money into the British farmers' pocket for a long time fell upon stony ground. Some recently has taken root, and far-seeing landowners are now putting our theory into practice by offering land upon conditions that will induce capitalists to invest in fruit culture precisely as they do in coal and iron. In this and the adjoining counties good landlords are raising and distributing to their tenantry apple and pear trees by thousands. These mostly are standards on free stocks, the only class of tree suited to pasture and arable land. Nurserymen, again, who have brought propagation up to a fine art, are producing standards and dwarfs by the million, and these surely in a few years should make their mark. Meantime, a complete network of markets, I insist, must be created throughout the kingdom.

From the preceding remarks those who run may gather the fact that I do not set much value on the thousands of acres of ragged, decrepit moss and lichen laden trees, but until the new plantations come into bearing we must make the best of them. Then, with Gladstonian vigour, we may hew them down, and let the apple-sick sites go back to hops, corn, and pasture. Upon this principle change of site may be worked precisely as gardeners now manage their strawberry plantations, and with similar results. And I venture to say, one acre of modern orcharding will beat ten of the old—at least, in the West Midland Counties.

Already I am afraid my paper is too long, but having warmed to my subject, I should now like to say a few words upon the formation of a modern orchard. I might divide them into several parts, such as aspect, site, soil, preparation, planting, the best style of tree, manuring, mulching, pruning and protection, gathering, storing, packing and marketing, but, my time being limited, my words must be brief and general.

Aspect and site being so closely dovetailed together, these I will not attempt to separate. All gardeners, I believe, are pretty well agreed that a south aspect is best, as trees in this position ripen their wood well, and produce fruit of the highest colour and quality. The apple, however, being perfectly hardy, the quality of the soil must not be lost sight of; neither must altitude and shelter from north and east winds be repudiated. Under these circumstances, the soil being deep sandstone loam resting on marl, and naturally drained, I should not object to a point east, or any other aspect round with the sun to full west. The latter, however, I should prefer, and for these reasons: although western

gales in this part of the country do some damage, it is well known that if plants are exposed to the first rays of the morning sun when they are frozen they will suffer, but if they are shaded until they are gradually thawed by the rising temperature of the air, they will stand a few degrees with impunity. An orchard open to the east or south-east is almost sure to suffer after an attack of spring frost when in full flower or setting, whereas one with a western aspect, which does not receive the sun until the temperature has risen and dispelled the frost, often sets and carries full crops to maturity. Hardly a year passes in which the gardener does not find early crops of all kinds are safer and finer upon west borders than upon others, therefore I think few will deny that his experience is of great value to the planter. The site, I may say, should be above the line of fog, and it should not be too near or on a level with water. If naturally drained much time and expense will be saved, otherwise this operation must be well carried out as a preliminary preparation. This may be performed in two ways, viz., by trenching two spits deep for pyramids or bushes, or by taking out large circular stations on grass or arable land for standards. If trenching is decided upon, the bottom spit, if heavy and inferior, should not be brought to the surface, but it may be ameliorated by the addition of burnt clay from the drains, by road scrapings, or any other fresh friable material short of rich animal manure. This, unless the staple be very poor, I would keep back for use as a mulch after the trees are planted. On all ordinary loams young trees grow fast enough at first, but the time comes when they must be fed, otherwise they cannot be expected to yield year after year fruit of the finest quality.

In the preparation of stations for standards on grass or tillage ground, I would throw off the top spit nine feet in diameter, break up the bottom, and throw out clay or bad material to be carted away or burned. If cold and at all unfavourable to root growth, exposure of the soil for a few weeks or months would greatly improve its quality. Otherwise, after correcting the bottom spit, that thrown off first, turf included, with anything in the way of road scrapings or old lime rubble added, may be chopped in until the hole is quite full, or a little above the general ground level. A stout stake should then be driven down to the solid bottom as a support for the tree when planted.

Planting may be performed at any time from the beginning, of October up to the end of April. Autumn, however, is best, as the roots at once take to the soil, and the trees make a fair growth the following summer. October and November undoubtedly are the best months, that is, provided the land is in perfect condition and the weather favourable; but so important is getting the trees into the ground when it is fairly warm and dry, that I would rather defer planting until April than risk placing

the roots in a pasty medium. Trees of home growth—that is, from one's own nursery, which every fruit grower should have—may be planted much earlier than others brought in direct from a distance. All trees should be carefully divested of faulty or injured roots by a clean cut with a sharp knife; they should never be allowed to become dry, and each root and fibre should be spread out in a horizontal position, lightly covered, and watered home.

In the arrangement of trees, the rows, if convenient, should run from north to south or north-east to south-west, as three out of the four sides then receive an equal share of sun and light. The old fault of planting them too close should be carefully guarded against, as good fruit cannot be expected when the heads grow into each other and the roots are constantly shaded. Standards of upright-growing varieties may be placed thirty feet apart each way, whilst forty feet will not be found too much for spreading trees like Flanders Pippin and Blenheim Orange. Trees, again, of one variety, or a similar habit of growth, and which ripen their fruit at the same time, should be kept together, or in rows, alternating with others of a spreading or upright character. By observing this rule at the outset the general and orderly appearance of the nursery will be greatly improved, and much time and labour will be saved when gathering the fruit. The same rule applies also to pyramids and bushes, which, by the way, should have plenty of room for extension in every direction, as no extensive planter can afford to prune close home upon villa garden principles, especially when the best of the fruit is cut away by the process. Thinning the shoots and branches annually, of course, is necessary, but beyond this and maintaining the balance by tipping a gross shoot, I should let each tree go. The distance apart will depend upon the kind of stock, as trees on the French Paradise may be grown for years at distances of four to six feet apart each way. On the English Paradise or Doucin, which I like best, they grow stronger, consequently more room is required. Twelve feet from row to row, and six feet from tree to tree, will give them room for a long time, but eventually it may be necessary to transplant every alternate tree, when those left will stand equidistant, viz., twelve feet from stem to stem. Some I know plant much closer, but when it is borne in mind that a well-developed head turns off not only more, but better fruit than a small one, abundance of room is a decided advantage. Moreover, plenty of space favours a spreading growth, which keeps the heads nearer the ground, safe from wind and easy of access for pruning, manipulating, and gathering. When standards are planted they should be well secured to the stakes previously driven, but in a way that will allow them to settle with the subsiding soil, otherwise the roots will drag and strangle. If on pasture land, they should be well

protected from sheep and cattle, and the orchard itself must be fenced and wired round to keep out hares and rabbits.

VARIETIES.—The only point I must now venture to touch upon is the selection of varieties for special soils, situations, and purposes. A few years ago we planted very early sorts for coming in before the American importations, but this is now over, as the quick run across, and summers hotter than our own, combined, enable our friends to be abreast of us at the beginning, as for a long time they have been at the end of the season. Our only way out of this dilemma, as I have before observed, is high cultivation. We have a climate which ripens fruit crisp, tender, and juicy, not quite so highly coloured perhaps, but in my opinion superior to the general run of American. We have the soil, which, thanks to yearly tenancies, nobody cares to till, and we have the ability. All we want is quality, then it matters little whether we market early or late, always provided we confine ourselves to a few of the best sorts which do well in the locality. This hackneyed phrase for a long time puzzled would-be growers, who said, Where must we look for anything better than a Suffield or a Blenheim? Well, I am not sure that anyone requires anything better, but if they do, they must just look into any of the great well-known nurseries about the end of September, and there they will find thousands of trees of all the leading kinds carrying fruit of the highest quality. Some of these on dwarfing stocks—just the thing for the garden or home nursery—will be loaded with large, bright fruit, of which at the present time we ought to have one hundred thousand tons ready for storing. They will find also standards on free stocks specially prepared for planting on pasture and arable land. From these they may select scores or hundreds of trees of one sort, and so on of another, but on no account must they select one or two trees each of a hundred sorts, as this plurality is a great drawback in commercial culture. Very early sorts generally go direct from the trees to the market; medium and late sorts must be stored in dark, cool fruit-rooms or dry cellars, and this accommodation, or the want of it, must be the guide in making a selection.

Gathering, storing, and marketing hitherto in the western counties has not received proper attention; but a great improvement is now taking place, and the day, I hope, is not far distant when ruthless shaking the boughs will be looked upon as a barbarous custom of the past. Apples worth growing are worth hand-picking, and when hand-picked they are worth sizing—that is, dividing into two classes before they are stored or sent to market. The best only should be sent away; seconds may be retained for home use, or consumption in the neighbourhood. There should be no mixing of sorts, or good and bad together, but one uniform quality should prevail. Buyers in this part of

the country still stick to their pots. I do not mean earthenware, but wicker, which hold from five to seven pecks each; but invariably they sell by weight, and this, I think, is the fairest way, as anyone can compute the value of a ton of apples. Before apples are hand-picked for storing they should be ripe, that is to say, the kernels should be brown and somewhat loose in their cells. The fruit, moreover, should be perfectly dry and free from spot or blemish, as one black sheep soon demoralises the flock. Once put away, the less they are turned or handled the better, especially when sweating or during frosty weather.

If the store-room is fitted with lath shelves, the choice varieties should be placed one, or at most two layers, thick, but late sorts grown in great quantities may be laid upon dry floors in greater bulk. They may be stored also in dry flour-barrels, which should be labelled and put away in a low even temperature for the winter. Good aristocratic store-rooms are rather expensive; but a cutting driven into a dry bank and covered with thatch, with double doors at one end, will make a store equal to the best and most elaborate in the kingdom. Resinous wood should never be used in the manufacture of shelves. Neither should hay or straw be admitted within the walls, as all these materials impart a disagreeable flavour. Dry fern, on the other hand, may be used for covering purposes, but very little of this will suffice where frost, and, more especially, heat-proof stores are properly constructed.

DISCUSSION.

Mr. CLARKE considered a little practice worth a great deal of theory, and the best planters always planted early apples so as to gather from the trees and take them straight off to market. Planting late sorts involved a considerable outlay in sorting and storing. He once grew a hundred bushels of Wellingtons, and half of them went rotten before it was time to take them to market.

SELECTION OF APPLES AND PEARS FOR SCOTLAND.

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In drawing up the following lists of the best apples and pears for growing in Scotland, for the National Conference, I have aimed at selecting those varieties which are of a hardy and vigorous constitution, free-bearing, and large-sized fruit of their respective kinds, and particularly varieties that are generally found doing well wherever they are grown throughout the country. Generally speaking, the best dessert apples are of rather a

small type, and there is much room for improvement in their average size. Blenheim Pippin and Worcester Pearmain, when at their best, make very handsome dishes of dessert; while all those of the Golden Pippin type are, as a rule, not a profitable crop, and, although of fine flavour, are insignificant in appearance. Court of Wick, Court Pendu Plat, Kerry Pippin, Scarlet Nonpareil, Thorle, and Yellow Ingestrie, are all first-rate apples in every point except size. Cox's Orange Pippin, Ribston Pippin, Claygate Pearmain, Duke of Devonshire, Mannington's Pearmain, are generally of a fair size, and first-rate dessert apples in their seasons.

Of culinary apples there is a much more satisfactory choice; and all of the first twenty varieties usually attain to over medium size, and may be profitably grown in all districts suitable for apples. There are also a number of very fine culinary apples among the "next thirty varieties," especially some of the newer varieties, and several of them may prove equal to, or better than some in the first "twenty," in favourable localities, or under peculiar circumstances. In cold districts, and at high altitudes, the following are among the best varieties that are generally found to thrive well: Irish Peach, Devonshire Quarrenden, Oslin, Thorle, Kerry Pippin, King of the Pippins, Golden Reinette, Cambusnethan, Paradise Pippin, Downton Pippin, Court of Wick, Court Pendu Plat, dessert apples; and Early Julien, Keswick Codlin, Duchess of Oldenburg, Ecklinville, Aitkin's Seedling, Cellini, Stirling Castle, Tower of Glamis, Warner's King, Yorkshire Greening, Alfriston, and Wellington, culinary apples.

The selections given are by no means exhaustive of the good varieties of apples; and there are some excellent local varieties which thrive well in their native districts, and a few of which, as they become wider known, will probably become popular in other parts of the country. Many varieties with a good reputation in more southern latitudes are quite worthless in Scotland, and are never met with in anything like their best form. Notably so is this the case with such fine English apples as Bess Pool, Hoary Morning, London Pippin, Welford Park Nonesuch, Belle Josephine, Winter Majetin, and others of a like nature, which are seldom if ever seen in a passable state of either size or quality.

The best pears require special treatment and the highest cultivation to have them in first-rate perfection in most parts of Scotland. In a few favourable districts, such as the best parts of the valleys of the Tweed, Clyde, Forth, and Tay, and in a few other parts lying below 300 feet of altitude, many first-rate varieties of pears thrive well and bear freely in the open ground, as bushes, pyramids, and standards; but in all other parts they require the protection of walls to bring them to perfection.

Some of the hardiest varieties are occasionally met with bearing freely in the open in exposed places, but generally they are not profitable to cultivate, and invariably they are poor in quality, and of very little service as dessert fruit. For cold localities the best varieties are Crawford, Fair Maggie, Black Achan, Hessle, Jargonelle, Doyenné d'Été, Williams' Bon Chrétien, Beurré d'Amanlis, Louise Bonne of Jersey, Swan's Egg, Hacon's Incomparable, and Easter Beurré; and all should be grown on walls, except perhaps the first four, which are very hardy.

There are not many pears grown specially for stewing purposes, as the dessert varieties are too often found to be only fit for stewing; but the varieties named in the list are all good and fairly prolific, especially Catillac, which is one of the most profitable of standard pears.

The following selections of apples are the most suitable for cultivation in Scotland:—

THE BEST TWENTY DESSERT APPLES.

Arranged in the usual Order of Succession.

Early Margaret.—A good bearer, and the best of the very early apples.

* *Irish Peach*.—Does well almost everywhere; free bearer, and good.

Devonshire Quarrenden.—Generally does well, even in cold localities.

* *Oslin*.—A favourite old variety; bears freely; not quite first-rate in quality.

* *Thorle*.—Another favourite old apple; bears moderately; of first-rate quality.

†* *Kerry Pippin*.—A well-known prolific variety, and always good.

†* *Worcester Pearmain*.—A fine dessert apple; tree hardy and vigorous; succeeds everywhere.

Yellow Ingestrie.—A beautiful dessert apple; rather small, but very prolific.

†* *King of the Pippins*.—A sure bearer and a useful apple, but not of first-rate quality.

†* *Cox's Orange Pippin*.—A first-rate variety; good bearer, and of the highest quality.

* *Ribston Pippin*.—Does moderately well; on walls is generally first-rate.

* *Blenheim Pippin*.—Free bearer, and one of the best and most useful of apples.

†* *Court of Wick*.—A sure bearer; rather small; generally first-rate quality.

Adams' Pearmain.—A useful apple and a sure bearer, but not always first-rate.

Mannington's Pearmain.—A good bearer, and generally first-rate.

†* *Claygate Pearmain*.—One of the best late varieties, and an excellent bearer.

Scarlet Nonpareil.—Moderate bearer; first-rate in good seasons.

Court Pendu Plat.—A useful late variety; moderate bearer; good quality.

* *Duke of Devonshire*.—Good bearer; always fine quality; the best of very late apples.

Sturmer Pippin.—Generally bears freely, and in good seasons is of fair quality.

* Best twelve varieties marked with an asterisk.

† The best six varieties are marked with a dagger.

THE NEXT BEST THIRTY DESSERT APPLES.

Arranged Alphabetically.

- American Mother*.—Free bearer; fine size; first-rate quality.
Ashmead's Kernel.—Good bearer; small; late; excellent quality.
Baddow Pippin.—Good bearer; medium size; late, and first-rate.
Barcelona Pearmain.—Good bearer; small; excellent quality.
Braddick's Nonpareil.—Regular bearer; tree hardy; quality first-rate.
Cambusnethan.—A free bearer; good size, and fine quality.
Cockle Pippin.—A prolific variety; rather small; generally first-rate.
Cornish Aromatic.—A good bearer, and first-rate in most seasons.
Cornish Gilliflower.—Moderate bearer; first-rate in good seasons.
Downton Pippin.—Prolific bearer; small, but the best of the Golden Pippin type.
Dutch Mignonne.—Very prolific; medium size; requires a fine season to be first-rate.
Early Harvest.—A prolific early variety, and generally of good quality.
Fearn's Pippin.—Good bearer, and of excellent quality.
Golden Harvey.—Good bearer; small, but first-rate.
Golden Reinette.—Regular bearer, and a first-rate variety.
Gravenstein.—Good bearer; large; tree hardy; fine refreshing flavour; first-rate.
Hubbard's Pearmain.—Moderate bearer; medium size; fine quality.
Lemon Pippin.—Regular bearer; medium size; late; first-rate.
Margil.—Good bearer, and of first-rate quality.
Old Nonpareil.—Good bearer; small; requires a good season to be first-rate.
Paradise Pippin.—Prolific old variety; handsome shape, and good quality.
Pineapple Russet.—Good bearer; large; fine flavour; first-rate.
Ravelston Pippin.—A prolific variety; large, and fine autumn apple.
Red Astrachan.—Good bearer; large and very handsome, good quality.
Red Margaret.—Good bearer; medium size; very early; fine quality.
Red Winter Reinette.—Prolific bearer; very handsome; good quality.
Reinette de Canada.—Good bearer, and generally first-rate.
Rosemary Russet.—Constant bearer; fine size; first-rate quality.
Scarlet Pearmain.—Very prolific; smallish; very pretty; good quality.
Wyken Pippin.—Good bearer; small; of first-rate quality.

THE BEST TWENTY CULINARY APPLES.

Arranged in the usual Order of Succession.

- * *Keswick Codlin*.—A sure bearer, very hardy, and the most useful very early apple.
Duchess of Oldenburg.—A free-bearing and very handsome variety.
†* *Lord Suffield*.—One of the best, and thrives well in most parts.
†* *Ecklinville*.—Very hardy and prolific, and probably the best of autumn culinary apples.
Cellini.—Very prolific and useful, bears well in cold districts; tree liable to canker.
* *Hawthornden*.—An excellent and prolific variety; liable to spot in cold and wet places.
Manks' Codlin.—A useful free-bearing variety.
Cox's Pomona.—A fine free-bearing variety, of good quality.
Loddington.—Free-bearing, large, and excellent.

* The twelve best varieties are marked with an asterisk.

† The six best varieties are marked with a dagger

- †* *Stirling Castle*.—One of the best and most prolific of culinary apples.
New Hawthornden.—A free-bearer, large and excellent variety.
- * *Tower of Glamis*.—Generally a good bearer, vigorous grower, and useful.
- †* *Warner's King*.—Vigorous growing and free-bearing; one of the best.
- * *Golden Noble*.—Good bearer; tree hardy and vigorous; a very fine variety.
- †* *Blenheim Pippin*.—A free bearer, vigorous grower, and first-rate variety.
Yorkshire Greening.—A regular bearer, and a useful apple.
- * *Alfriston*.—A free bearer; hardy and vigorous, and a first-rate apple.
- Striped Beefing*.—A good bearer, and a fine late-keeping apple.
- †* *Wellington*.—Free bearing; thrives well in most parts, and generally first-rate.
- * *Northern Greening*.—A prolific variety, and first-rate keeper; tree grows slowly.

THE NEXT BEST THIRTY CULINARY APPLES.

Arranged Alphabetically.

- Aitkin's Seedling*.—Very prolific, hardy, medium size, excellent quality.
- Annie Elizabeth*.—Good bearer; hardy and vigorous; large; first-rate quality.
- Beauty of Kent*.—Free bearer; large and handsome; first-rate.
- Beauty of Moray*.—Prolific bearer; good size; first-rate quality.
- Bedfordshire Foundling*.—Good bearer; tree hardy; excellent quality.
- Brabant Bellefleur*.—Good bearer; large and fine; first-rate quality.
- Catshead*.—Moderate bearer; large and useful; good quality.
- Doctor Harvey*.—Free bearer; large and very fine; first-rate quality.
- Dutch Codlin*.—Good bearer; large and handsome, of good quality.
- Early Julien*.—Very prolific; rather small; the earliest good variety.
- Emperor Alexander*.—Good bearer; large and very handsome; good quality.
- Frogmore Prolific*.—A free bearer; handsome, and of first-rate quality.
- Galloway Pippin*.—Good bearer; smooth, yellow, handsome apple; first-rate.
- Gloria Mundi*.—Rather shy bearer; occasionally very large and fine.
- Golden Spire*.—A sure and very prolific variety; handsome fruit; first-rate.
- Grenadier*.—Free bearer; large and fine fruit; first-rate quality.
- Hanwell Souring*.—Good bearer; useful late variety; first-rate quality.
- Kentish Fillbasket*.—Good bearer; large and useful; good quality.
- Lord Derby*.—Excellent bearer; large and handsome; of good quality.
- Lord Grosvenor*.—Very prolific; large and fine; early and first-rate quality.
- Maltster*.—A sure and free bearer; medium size, and excellent quality.
- Mère de Ménage*.—Moderate bearer; very large and handsome; first-rate quality.
- Nelson Codlin*.—Free bearer; large, and of excellent quality.
- Norfolk Beefing*.—Good bearer; a useful late variety; excellent quality.
- Peasgood's Nonesuch*.—Shy bearer; large and exceedingly handsome; first-rate quality.
- Pott's Seedling*.—Excellent bearer; large and handsome; of first-rate quality.
- Prince Albert (Lane's)*.—Prolific bearer; fine size; keeps well; first-rate quality.
- Ringer*.—A sure and prolific bearer; large, and of good quality.
- Round Winter Nonesuch*.—Good bearer; large and fine; first-rate quality.
- Yorkshire Beauty*.—Free bearer; large and handsome; first-rate quality.

* The twelve best varieties are marked with an asterisk.

† The six best varieties are marked with a dagger.

THE BEST TWENTY DESSERT PEARS.

Arranged in the usual Order of Succession.

- Doyenné d'Été*.—Free bearer; good quality; the best very early pear.
- †* *Jargonelle*.—An old favourite variety, and thrives well generally.
- * *Williams' Bon Chrétien*.—A sure bearer, and a useful autumn variety.
- Hessle*.—A very hardy and prolific variety, and one of the best orchard pears.
- †* *Beurré d'Amanlis*.—Very free bearing; large and handsome; of good quality.
- Pitmaston Duchess*.—A good bearer; large, and of excellent quality.
- †* *Louise Bonne of Jersey*.—A prolific bearer; hardy, and first-rate.
- * *Doyenné du Comice*.—Free bearing; large and fine, and of good quality.
- †* *Marie Louise*.—Does well generally; fine size, and of the highest quality.
- Thompson's*.—A moderate bearer; of first-rate quality.
- Beurré Diel*.—A prolific variety; large; but often gritty at the core.
- * *Beurré Bosc*.—Good bearer; large and fine; first-rate.
- * *Beurré d'Arenberg*.—Very prolific; medium size; generally very good.
- * *Winter Nelis*.—Good bearer; small; but of first-rate quality.
- †* *Hacon's Incomparable*.—Very hardy; prolific, and generally first-rate.
- Napoleon*.—Free bearer, and in most seasons an excellent pear.
- * *Glou Morceau*.—Prolific; keeps long in use, and generally first-rate.
- Josephine de Malines*.—Medium size, and in good seasons first-rate.
- †* *Easter Beurré*.—Free bearer; hardy; sometimes gritty, but generally first-rate.
- Beurré Rance*.—Prolific bearer; fine size; in good seasons excellent.

THE NEXT BEST THIRTY DESSERT PEARS.

Arranged Alphabetically.

- Autumn Bergamot*.—Free bearer; small; tree hardy; generally good quality.
- Autumn Nelis*.—Good bearer; small; early; of first-rate quality.
- Bergamot d'Esperen*.—Good bearer; medium size; late; and generally first-rate.
- Beurré Bachelier*.—Moderate bearer; large; requires a good season.
- Beurré de Capiaumont*.—Prolific bearer; medium size; useful; not first-rate quality.
- Beurré Hardy*.—Good bearer; fine size, and generally of good quality.
- Beurré Superfin*.—Good bearer; large and fine; first-rate quality.
- Brown Beurré*.—Moderate bearer; sometimes gritty at the core; in good seasons first-rate.
- Colmar d'Été*.—Prolific bearer; a very good early pear; excellent quality.
- Count de Lamy*.—Good bearer; medium size, and generally of fine quality.
- Duchesse d'Angoulême*.—Moderate bearer; large, and occasionally first-rate.
- Dunmore*.—Free bearer; medium size; generally excellent quality.
- Favourite (Clapp's)*.—Free bearer; fine size; excellent quality.
- Fertility*.—Prolific bearer; medium size; fine quality.
- Flemish Beauty*.—Free bearer; tree hardy; good size; sometimes first-rate.
- Fondante d'Automne*.—Moderate bearer; medium size; first-rate quality.
- Gansel's Bergamot*.—Good bearer; nice size; sometimes gritty; excellent flavour.

* The twelve best varieties are marked with an asterisk.

† The six best varieties are marked with a dagger.

- Jersey Gratioli*.—Free bearer ; medium size ; occasionally gritty ; generally first-rate.
- Madame Treyve*.—Good bearer ; large and fine ; of first-rate quality.
- Monarch (Knight's)*.—Irregular bearer ; medium size ; occasionally fine, and good quality.
- Muirfowl's Egg*.—Good free bearer ; very hardy ; medium size, and of good quality.
- Ne Plus Meuris*.—Free bearer ; good size ; sometimes gritty ; generally good quality.
- Olivier de Sèvres*.—Good bearer ; medium size ; fine late variety ; excellent quality.
- Passe Colmar*.—Prolific bearer ; fine size ; in good seasons of first-rate quality.
- Passe Crassane*.—Free bearer ; large and fine ; requires a good season.
- Red Doyenné*.—Free bearer ; medium size ; generally of good quality.
- Souvenir du Congrès*.—Free bearer ; large and useful ; generally first-rate quality.
- Swan's Egg*.—Prolific bearer ; medium size ; tree hardy ; of excellent quality.
- White Doyenné*.—Full bearer ; good size, and generally of good quality.
- Zéphirin Grégoire*.—Good bearer ; medium size ; late ; excellent quality.

THE BEST TWENTY ORCHARD PEARS.

Arranged Alphabetically.

- † *Aston Town*.—Hardy and free bearing ; small ; generally of good quality.
- † *Autumn Bergamot*.—Good bearer ; small ; sometimes gritty ; generally good.
- † *Black Achan*.—Prolific ; hardy ; good size ; a favourite old variety, but only second-rate.
- †* *Beurré d'Amanlis*.—Prolific ; tree hardy and vigorous ; large and fine ; of first-rate quality.
- † *Beurré de Capiaumont*.—Free bearer ; medium size ; of moderate quality.
- * *Beurré Diel*.—Free bearer ; large size ; often gritty ; occasionally very good.
- †* *Catillac*.—Prolific ; large and fine ; best of stewing pears ; quality, first-rate.
- † *Crawford*.—Very prolific ; smallish ; favourite early variety ; of moderate quality.
- † *Croft Castle*.—Prolific ; small ; tree hardy ; a useful variety, of good quality.
- * *Doyenné d'Été*.—Free bearer ; medium size ; very early ; good quality.
- † *Eyewood*.—Good bearer ; medium size ; excellent quality.
- † *Fair Maggie*.—Very prolific ; hardy tree ; medium size ; a popular variety ; of good quality.
- * *Favourite (Clapp's)*.—Free bearer ; good size ; good quality.
- †* *Fertility*.—Prolific bearer ; good size ; excellent quality.
- †* *Hacon's Incomparable*.—Prolific bearer ; fine size ; first-rate quality.
- †* *Hessle*.—A prolific and sure bearer ; moderate size ; the most popular orchard pear.
- * *Jargonelle*.—Good bearer ; fine size ; first-rate quality.
- * *Louise Bonne of Jersey*.—Free bearer, large and fine, and of first-rate quality.
- * *Marie Louise*.—Free bearer ; excellent size ; first-rate quality.
- †* *Williams' Bon Chrétien*.—Very prolific ; large, and of excellent quality.

* The twelve best varieties are marked with an asterisk.

† The twelve most prolific varieties are marked with a dagger.

THE BEST SIX STEWING PEARS.

*Arranged Alphabetically.** *Bellissime d'Hiver*.—Free bearing; excellent quality; a useful variety.* *Catillac*.—Tree vigorous, hardy, and prolific; first-rate quality; the best stewing pear.*Gilgil*.—Hardy and prolific; an excellent variety.*Uvedale's St. Germain*.—Moderate bearer; large; good quality; requires a good season.* *Verulam*.—Free bearing; hard and vigorous; of excellent quality.*Vicar of Winkfield*.—Good bearer; large and useful.

CULTIVATION IN JERSEY.

By Mr. CHARLES B. SAUNDERS, F.R.H.S.,
St. Saviour's, Jersey.

The Island of Jersey, being so noted for the growth and cultivation of fine fruit, especially apples and pears, I venture to offer a few remarks upon the modes of culture, and the varieties cultivated, thinking they might be acceptable to the Conference, and also to the general body of horticulturists interested in the production of these health-giving and palate-pleasing fruits.

Jersey being the most southerly of the group of islands in the Bay of St. Michael's, and the slope of the land being from north to south-west, enjoys a very favourable climate, the general moisture, owing to its position and the saline air, which almost always may be felt blowing over its surface, renders it peculiarly adapted to the growth of pears. The soil is a good loam, upon a substratum of clay retentive of moisture, which suits the Quince stock, upon which most of the pear trees are budded or grafted. There are localities along the coasts of which the soil is much mixed with sand, owing to the continuous drift in stormy weather, whilst some parts of the western side of the island are so much exposed to the Atlantic Ocean as to be entirely unfit for fruit culture, and scarcely worth cultivating, the cereals and root crops growing upon them being very often subject to serious injury from the force of the westerly gales. Now, it is easy to understand why the most protected and best sheltered situations are selected for the growth of the finest and best kinds of fruit. Apples are grown on the higher and drier parts of the island, where the land is stiff enough and the drainage good, hence the orchards, where the more ordinary kinds are grown for the manufacture of cider and general consumption, are generally surrounded by hedgerows from five to eight feet high, and planted with elm and other descriptions of forest trees. The

* The three best varieties are marked with an asterisk.

apple trees in these orchards are generally grafted six feet from the ground, and have spreading circular heads, which are perfectly beautiful when in bloom. Very many of us can recollect when the Weigelas of sorts were first introduced that their great recommendation was that they were as "beautiful as apple blossoms." Were not apple blossoms beautiful before then?

These orchard trees, which make such a beautiful display of flowers, and produce in favourable seasons such an abundance of fruit, are much neglected, and allowed to grow in a confused mass of branches. To scientific horticulturists it seems a pity that, where nature does so much, man should do so little in the way of pruning, so as to give the trees a more regular form and better appearance. You will, I think, gentlemen, agree with me that judicious pruning—*i.e.*, removing weak and superfluous branches, would have the good effects of improved appearance, more healthy growth, and finer fruit. The general character of the growth is so vigorous as to render it unnecessary to prune the extremities of the shoots, except for the sake of shaping the trees and balancing the heads, but "thinning out" is the style of pruning requisite.

The finer descriptions of apple fruit are grown in gardens sometimes against the walls, on espaliers, or on the long cordon system. The dwarf cordon is not much practised, nor is it desirable, inasmuch as the growth, in spite of the Paradise stock upon which the trees are usually worked, becomes so strong that it requires constant cutting back to keep it within the desired limits, and this constant repression of growth is not conducive to fructification.

The finest Ribston Pippin apples are grown upon south walls in sheltered gardens, trained upon the fan system, the strong radiative shoots being selected to form the frame of the trees, and the lateral and weaker branches being pinched and pruned off, so as to get fruit spurs to form. It is an excellent system, barring the disadvantage of the early maturity of the fruit. Very few other sorts are thought worthy of wall culture. The dwarf bush, the open standards, the rider or tall standard trees, are all acceptable forms of garden trees, where the space is sufficient; and such varieties as Early Stibberd, Red Astrachan, Lord Suffield, Hawthornden, Red Quarrenden, Hooper's Seedling, Downton, King, Golden and Walton Pippins, Grand Alexander, Cox's Pomona and Orange Pippin, Court of Wick Pippin, English and Dutch Codlins, &c., are grown freely on Paradise as well as other stock, and take but little space. It is not unusual to see crops of fruit considerably above the weight of the trees producing them. Planting Paradise stock apple trees in rows six feet apart, and the trees at three feet apart in the rows, suggests a system of culture which might be made re-

munerative, and were it not for the constant changing of tenants from one piece of land to another, might be advantageously practised. It is not so here; most of the fine fruit is produced on accidental trees, either found in gardens on taking possession, or planted by incoming tenants. Taking into consideration the time necessary to get a stock of trees into a good bearing state, few tenants would care to adopt any system of planting or training from which they would not derive some immediate advantage,

The cultivation of the pear has been so very remunerative for years past, that it has been made a subject of more general study and system. Many of the old gardens, established half a century or more ago, offer evidence of the walks having palisades on both sides, for the purpose of training pear trees upon them, and in some cases the palisading has been double, so as to admit of trees being trained on both sides, one foot or less being the intervening space between the rows of palisades. Trees planted in this way are generally productive; the main lateral branches being trained and supported horizontally, a regular and continuous supply of sap is provided during the growing season for the development of the fruit. This system has and does answer well, and as long as the trees continue healthy they bear good crops of fruit, the size of which much depends upon the amount of thinning practised. Against walls, both horizontal, fan, and cordon styles of training are practised, all of which answer well in the hands of careful attendants. Dwarf bush and pyramidal trees are also grown, many acres of ground being devoted to the cultivation of the celebrated Chaumontel Pear. The great number of excellent varieties grown, and their exquisite though varied flavours, make the pear a fruit of general acceptance, though few varieties are much grown. Citron des Carmes, Jargonelle, Williams' Bon Chrétien, Louise Bonne, Maréchal de Cour, Beurrés d'Amanlis and Diel, Duchesse d'Angoulême, Doyenné du Comice, Chaumontel, Glou Morceau, and Easter Beurré are more often met with than other varieties; and amongst culinary pears, the Belle de Jersey (syn. Belle Angevine), and Catillac, or pound pear, are considered the best.

A rich, strong loam suits the Quince stock best, a lighter soil suits the free stock for pears. The advantage of growing pears on the quince as a stock is early fructification, whereas the generally-accepted axiom respecting pears grafted on the free or pear stock is, that—

He who plants pears,
Plants for his heirs.

There are but few large pear trees on the island; occasionally one or two are met with, towering above the apple trees in the orchards, but such trees are the exception; and land is so ex-

pensive in Jersey that no room can be spared for unproductive trees (which is the case whilst the tree is growing).

The Jersey farmer, cultivating twenty acres of land, and making a comfortable living off so small a surface, cannot afford to allow a single perch of it to remain unproductive, and every square yard is made to contribute towards the general expenses. The space allotted to kitchen gardening and fruit culture is generally near the homestead, the pathways being planted on either side by bush apple and pear trees, currant and gooseberry trees filling up the intervening spaces in the rows until the trees have grown sufficiently large to cover the whole space. These highly-cultivated and richly-manured pieces of ground are made to produce crop after crop in rapid succession. No sooner is one crop off the ground than another replaces it (organic, and not artificial manures being used). The trees get the benefit of these repeated dressings and the manipulation of the soil.

FRIDAY, OCTOBER 19.

HARRY J. VEITCH, Esq., F.L.S., F.R.H.S., in the Chair.

FRUIT PRODUCTION AND DISTRIBUTION FROM A PROVINCIAL POINT OF VIEW.

By Mr. F. J. BAILLIE.

I feel some explanation is needful for the introduction of a paper which does not profess to be technical before such an audience and upon such an occasion, but I have long held the belief that, whilst we pay strict attention to the practical points or strictly technical details which rightly claim the closer attention of the specialist, we ought to give some prominence to particulars which, we may say, constitute the fringe of a subject.

Whilst these are, perhaps, of a too general character to possess much charm for the person intent upon some particular detail, they serve to put us in touch with the public, and thus are helpful in removing popular prejudices; or there is a sense of separation somehow between those to whom we look for fruit consumption and those to whom we look for fruit production.

I knew, too, that there would be gentlemen of wide practical experience, whose names are in the front rank of the honourable record of present-day horticulture, taking active part in these proceedings, and I thought that they would treat of particular phases of the subjects irresistibly suggested by a "National Fruit Conference."

In this I was perfectly right. Whether I was right in my choice of a subject, for the reasons already stated, remains to be seen, but I venture to think, from what I know of the good-nature of those connected with garden pursuits, I can claim your indulgence if I fail to gain your approval; and if any remarks of mine are such as to provoke hostility of thought, you must please put them down to provincial prejudice, or, may I say, to that simplicity which is one of the most prominent attributes of raw rusticity.

I appreciate the difficulty of saying anything new on the question, but I shield myself behind the fact that the reiteration of a truth is not a needless undertaking until precept is put into practice. So long as we pay our millions of money into other hands for produce which could come from ourselves, we are quite safe in assuming that there is yet reason for action.

Coming up from pastoral pursuits to this great centre of crowding, clamouring life, how can one express the feelings that somehow naturally force themselves to the front? They may be said to be somewhat thus: Here you have in your great crowded centre somewhere approaching 5,000,000 of souls. This area, with its vast population, has practically grown nothing but bricks and mortar save the trees and flowers in its beautiful pleasure parks and its promenades; and if this great centre were dependent upon its own resources for market produce for its daily needs, it would very quickly have to answer its children's cry for bread by giving them stones.

This great multitude must take some feeding. The open country of the shires gives garden ground enough for all. The earnings of the provinces find their way largely into the pockets of the landowners, and they, in the natural order of present-day methods, spend a large portion of their time and the greater part of their wealth in London. There is a kind of feeling that, seeing so much of the wealth of the country comes here, more might be done for us and less for the foreign coquettes who court your favour and gain your sympathy and support for such things as we can grow quite satisfactorily at home.

I do not at all fear the bogey of foreign competition. This is, I remind myself, a National Conference, but the subject is really universal. The idea involved in fruit production and distribution is too large for a nation. We cannot, for instance, grow the orange. We should not like to dispense with it, therefore we invite the foreigner to send it to us; but we can produce pippins: then why should you raise your eyes above the beautiful fertile plains, say, of Kent and Sussex, and with the telescope of a false economy find beyond the seas, in the broad acres of America, Canada, Australia, and elsewhere, the admitted beauty of fruitful plains, but also an added imaginary beauty, really nothing

beyond what you could have seen without the glasses within the confining hedgerows of our British orchards ?

We must, however, get somewhat nearer the chief points to be considered. We must drop figure and get to facts. We think we may safely start with an aphorism. Cultivation of the land is the basis of all economy. Mother Earth, after all, nurtures the whole family of the human race. "The profit of the earth is for all ; the king himself is served by the field." The political economist and the social scientist can touch no profounder problem than the problem of production, and we cannot escape the consideration of the threefold aspect of the laws of life which all rightly civilised people recognise :—

1. The population must be properly employed.
2. The people must be clothed and fed.
3. As a necessary condition, the land must be cultivated and cropped.

Now we have already reminded ourselves that we have to take ourselves outside the limit line of streets and alleys, and get into the open country, where we find agriculture and horticulture side by side, sometimes overlapping each other, but always mainly concerned with these four phases of occupation :—

1. Cattle production, under which I would include the rearing and breeding of all animals for slaughter or other purposes.
2. Wheat production, under which head I would include all arable farming.
3. Dairy farming, under which I would include all milk, cheese, and dairy products.
4. Fruit farming, including the production of vegetables and other market produce of this character.

The consideration of the question of supply immediately brings before us the question of demand. We ask ourselves—What is demand ? Why is it needful to produce ? An elementary question, truly, but one which has been handled peculiarly by the jugglers of political and other economists. Briefly, produce is needed for the maintenance of life. It was easy for the French wit to say, "Give me the luxuries of life, let who will take its necessities ;" but necessities are—necessities ! We then ask ourselves, upon what can good health and happy life be best maintained ?

Well, I fear we should here quickly get into conflict of opinion. Doctors differ. I am justified, however, upon the grounds of science and experience, in asserting that men can live, and live healthfully and happily, on cereals and fruit, so that a wheat farm and a fruit farm would meet all national needs. Cattle farming we are not now concerned about.

I know I strike a chord which may not be one entirely of

harmony in a meeting of this character, when I say that man can derive all needful sustenance from the cereals and fruit; that is to say, humanity has in fruits—for cereals are fruits—all that it needs. Mark, please, I do not say it has therein all that it craves, but all that it needs.

Now, if in any other machine than that of man (if you permit him to be so considered for a moment), heat, essential for its going, could be got from deal logs, and it was being fed by the engineer with French polished mahogany and refined oils, we should consider it strange. Of course, he might do it if he liked; but, should we wonder why? Man, so far as his means permit, may, too, feed on what he likes, but the economist must first consider essentials, not preferences or prejudices. But I find I must push forward, for I dare not pursue fancy too far in a paper of twenty minutes' length.

After the determination of what is essential for the maintenance of life we must consider the labour question. Which of the four systems under which we have divided the question of cultivation employs the largest amount of labour, and in which are our labourers the most happily and healthily engaged? Unhesitatingly, with firmest decision, we answer, in fruit production. Quite lately I, by chance, became the travelling companion of one of the largest agriculturists in our county, whose farm lands had been laid down to grass. He had given up corn for cattle, and he told me that as a result fifteen cottages were at that moment standing empty so far as farm labourers are concerned. He had no further use for them, and they had gone—where? He did not know, but in all probability to swell the already congested population of the towns. How are we to get our open-faced, honest-hearted country population back to the green lanes and the gardens?

One of the best methods is the development of the industry of fruit production. But is our climate such as to encourage safely the cultivation of hardy fruits? Let us not commit the often rash errors of a too eager enthusiasm. I do not know which most to pity or blame—the blind optimist who to every question suggesting the possibility of big profits, Arcadian delights, and a contented population always basking in the sunshine of ease and unconcern, replies, "I answer enthusiastically—Yes;" or the poor pessimist who says our apples are only crabs, that there is a worm at every core, that the glory has departed, and we are all tumbling into the Slough of Despond.

But there is a *via media*. It is possible to make the crooked straight, and the rough places plain, if we only set ourselves heartily to find the more excellent way.

Hardy fruits can be grown, and well grown, in this much despised climate of ours; but, like everything else, it must be done properly. No more subtle sweetness, crispness, and alto-

gether right flavour can lurk beneath the skin of apple or pear than can be found in the flesh of a British-grown Cox's Orange or Ribston Pippin, or some of our best pears; and no sprightly sauciness of brisk acidity can be found in the often insipid flavour of many of the foreign sub-acid apples to compare with that of a Northern grown Keswick or Lord Suffield.

There are those about us, and apparently warmly interested in this movement, who go to extremes in both directions. In this problem of production let us remember we have all tastes to suit, all palates to please, and therefore a wide range for our catering. One cannot help being amused to read of somebody's pippin, which is the apple of the future for the essence of its sweetness and syrupy juiciness, to which sugar would be a superfluity if not an absolute detraction; and in another week's issue of the same journal the merit of somebody else's seedling, which is to be the apple of the future, is found in and founded on the fact that its beautiful tartness of flavour is such as absolutely to defy the seductive influence of sugar or syrup, bringing it to the dull level of the popular palate which can only take its strawberries when reduced to a kind of saccharine paste, which can only take currants as preserves, or cherries in brandy.

So long as opinions differ so widely we need not fear the unavoidable influence of climate in any of the home districts upon the qualities of our British-grown fruits.

Whilst admitting of a certain amount of healthy variation in the quality of the fruits, I would venture to say that the error of the past has been rather in the multiplication of kinds than in the other direction. Some people have prided themselves upon having as many varieties as they can count trees in their orchards, but I could never see the full force of the benefit of such possession. It is well to choose but few kinds, letting them be such as are suitable to the district and such as commend themselves as market favourites.

For instance, in the larger Lancashire towns apples of a brisk sharp flavour find much readier sale than the sweeter fruits, for which there may probably be greater demand in the south. If you can sell at Cottonopolis Keswicks or Lord Suffields by the ton, why not grow them by the acre rather than coddle with somebody's new seedling said to surpass the Newtown Pippin in its sugary flavour when the season is favourable enough for it to fruit? Meet the demand of the district, and proceed cautiously; extend as rapidly as you like, but carefully.

If it is worth doing at all, it is worth doing well. Do away with worthless incumbrances of the ground. A good fruit is as readily grown as a bad one. This is the crux in the provinces.

If time permitted me to draw you a picture of the typical farmer's orchard, you would not wonder that fruit-growing was a feeble industry in many places. Such so-called orchards are, many

of them, excellent hunting-grounds for the entomologist or the cryptogamic botanist, whose special attraction is amongst mosses and lichens. Most of the trees are favourable specimens of artistic antiquity. The only evidence of anything approaching a pruning process which I have ever witnessed amongst some of them was the wreckage of the storm or the broken boughs at apple-tide which had snapped asunder under the weight of the ladder against them.

If the orchards are carelessly kept—or carefully unkept—it is an equally peculiar fact that when fruit is borne by the trees it seems to suggest no necessity for right handling. Mark Twain in one of his sketches enlarges, I think, upon his experience in days when he was assumed to have the editorial charge of an agricultural paper, and in reply to a correspondent, he told him he thought he had himself to blame for the condition of his turnip crop, the defects of which he had just described. “You should wait,” said Mark, “until they are nearly ripe, then get up the tree and shake them down.” He found that was not the way turnips were treated, but the editor had probably seen a county farmer gathering his fruit, for that is precisely the method he follows on such an occasion. All this and much more must be changed before British fruit-growing takes the important place to which it is entitled.

The present position of the fruit question in the public mind seems to be that fruit is now used to grace the tables of the wealthy, or to add a kind of fashionable finish to the dinner of the fairly well-to-do; but it is seldom regarded as food pure and simple, though such it really ought to be.

Let anyone having an interest in philanthropic work cause district visitors or City missionaries to make inquiries amongst the poor of the large cities, and you will find that fruit is almost, if not entirely, absent from the list of dietary articles from which the food-supply of those who live in the narrow streets and the crowded alleys is derived. I have gathered statistics in our own district, and was startled to find how the poor live even in a provincial town, where a person placed at its centre might get between the hedgerows and into the fields well within half an hour. Ignorance and prejudice have helped to maintain this condition of things, for they have only the bare idea that fruit is palatable, and have no idea that it is also invigorating and healthful.

For the proper and complete development of the fruit movement in this country we must have all our forces to the front. There is a really steady demand, we are told, for the best fruits carefully gathered and well packed at most remunerative prices. That seems to meet the want in certain directions, but we must encourage those educational and moral movements which have for their aim and object the inculcation of habits of thrift and health amongst the masses of the people.

There should be, and there must be, a very largely increased demand for the home product, and the home product will be then forthcoming; and this brings us closer to some of the features we have to face in the question of distribution.

This opens up as many avenues of thought as the question of production—perhaps more, for in the question of production we deal largely with matters of conjecture, for we can never know the end of an unfollowed course, and if you advocate two methods or fifty you would find followers for each; but the question of distribution brings us at once face to face with problems of *£ s. d.*, and with the conditions of market operations and regulations.

I do not intend to take up the time of this meeting by attempting to deal with one of the most damaging conditions which we meet with as a most serious obstruction in the very outset, that, namely, of the railway rates; nor do I attempt to touch upon that other forcible deterrent—the question of land tenure. Both this and the railway question will, I find, be dealt with in separate papers; but until some sweeping change is made in the present system of railway charges, it seems that the British fruit-grower will find his industry shackled and weighted to such an extent as to prevent his making a profit at all commensurate with that which he is helping to put into the pockets of the railway shareholders.

Next to the railway question, we require the establishment of some responsible agency or agencies to take up, in combination, the conditions which cannot be successfully fought singlehanded, and this agency should not be merely commercially protective, but also educational. Amongst other matters, it should collect and publish careful data as to districts, climatic influences, meteorological notes, and such other intelligence as would serve to guide. This body would have to be influential and potent, for the power of monopoly is, as matters now stand, almost invariably against the producer and the consumer, and in favour of some intermediate agent, whose name is legion, apparently, and whose presence may be necessary for the discharge of commercial enterprises, but who ought to be regarded more in the capacity of a carrier or an agent rather than a trader or merchant.

Next we require the provision of centres of sale. Endless time is lost by the producer in his effort to find a market, and neglect at home is consequently unavoidable. It is essential that persons having produce to sell should be brought into contact with persons requiring to purchase, but we have at present no such facility. Cheshire has its cheese fairs, established by the order of a Council, and the staple product of the county therefore holds its own in spite of foreign competition. Birmingham has its onion fair; but I do not know of a town in England that has its fruit fair.

Then we ought to be able to purchase fruits by name as to variety. To the farmer's mind not so many years ago everything green upon the face of the field was grass. To the mind of the average citizen or citizen's wife anything that is round, and that has been plucked from a tree in an orchard, is an apple; it matters not whether it be a flavourless Crab or a Golden Pippin—it is an apple; but we want to initiate the public into a knowledge that certain apples carry with them certain qualities and certain flavours, and we want then to show that precisely what they want can be supplied. There are advertisements in connection with domestic commodities which seem to suggest the grave importance of your being sure you get somebody's starch when you ask for it. The same caution should be applied in the pomological department, and when the cook finds out that a certain kind of apple can be depended upon for a certain quality, we should find the beginning, too, of a more definite order of things.

Another great impetus to the home product might be insured if, at railway stations and other places where the public gather themselves in masses, English fruit could be obtainable instead of the everlasting French pears and American apples. And I should like, if those ugly iron *impedimenta* called "automatic deliveries," or some such wonderful name, are to be tolerated, that they should, in response to the penny and the push, give orchard plums instead of sugar plums, and apples and pears in preference to chocolate or candy.

Another idea that has long possessed me is the idea of the selling of fruits from sample. According to present methods of distribution a producer gathers his fruit and carries it away to the markets, there to stand with a load of it until it is distributed. Those who have learned the art of modern marketing have found out that prices decline as the day wears on, for the grower does not desire to cart part of a load home again. On the other hand, there may be a system of "topping"—I may be excused if I explain (for of this my present audience is doubtless ignorant) that this implies a process, possibly accidental, by which the larger, better fruits in a basket gravitate towards the top! This is, of course, open to the suggestion of unfairness on the other side; but if the grower submitted samples of his fruit just in the way the farmer does who has grain or seeds to sell, an immediate relief would result.

A farmer does not think of carting the yield of his grain fields to the open markets, but asks the merchant to buy upon the sample placed before him in the market; and he can sell or hold as he then thinks best. He would then be in a less likely position for the imposition of injustice.

Then I think, in the interests of distribution, our leading agricultural and horticultural societies—agricultural societies

especially—should recognise the industry, and admit home fruit products into their schedules of subjects for competition. I am glad to observe that the Royal Agricultural Society of England has taken up the matter, and hope other agricultural societies may now be induced to follow. It is likely that more good will arise from sources of this character than through minor efforts of less prominent bodies, as the subject would then be considered along with the problems of land cultivation in their more important and varied aspects.

I must not forget to include the all-powerful Press. We have natural friends in the editors of horticultural publications, but I am glad to see the general Press of the country is now taking an interest in the question. Whilst many newspaper readers are evidently competent to take an intelligent view of the matter, there are some who seem to discern in the agitation something like the sectarian movement of a new faith, for which they have quickly set themselves to invent the name of the "Faddist." Well, let it be so.

If we are to get public attention called to the question, we may hope that the long delayed interest will be fairly and fully aroused; and whilst we rejoice in the peace and prosperity of a nation preferring pruning-hooks and ploughshares to swords and spears, we shall yet the more rejoice when we gain the greater victory and proclaim the wider conquest of the sickle and the spade.

COMPENSATION FOR ORCHARD PLANTING.

By MR. WILLIAM F. BEAR, Streatham.

It is, no doubt, solely because of the great interest which, for many years, I have taken in compensation for tenants' improvements, that I have been invited by the Committee of this Conference to read a paper upon a subject of the practical details of which I probably know less than any person in this room. I must confess that I felt a strong disinclination to place my views before a body of experts, and if anyone but your worthy secretary, who has been very obliging to me on more than one occasion, had asked me to come forward, I should have declined; for, should anyone ask me what I know about orchard planting, I should have to reply, Next to nothing. When I took a farm some years ago, I planted some fruit trees, and had them in fine bearing condition by the time that I quitted the holding, to the advantage of my successor. More recently I have planted some apples and pears in a suburban garden, and have scarcely seen a blossom on any of them for the last three years. However, my subject is not planting, but compensation for planting, and upon

that topic I have very decided views, and few persons, I believe, have given more thought to it. Still, as my object is to elicit discussion rather than to air my own opinions, I shall be as brief as possible in my remarks.

Cultivators of the soil are constantly being told that they should grow more fruit. Ordinary farming does not pay, and is not likely to pay, it is contended, and farmers should turn their attention to the production of vegetables and fruit. Now, there is no reason to fear that too many farmers will take that advice, the rank and file of the class being very slow to make any important changes in their routine. It is obvious that if even a twentieth part of the land of the United Kingdom were devoted to the growth of culinary vegetables and fruit, the market would be glutted, unless the nation were converted to Vegetarianism. But, as I have said, there is no reason to fear that too many farmers will become market gardeners and fruit-growers, and there will be all the less reason to expect this, as I believe a turn in the tide of ordinary farming as a business has set in—whether for a long or for a short period it would be rash to predict. The fear is—to confine myself to fruit-growing—that, in spite of the “boom” which appears to have been started in that industry, its development will be slower than is desirable. There are many reasons why it should be so. Enough has been said in recent years, and said over and over again, to prove that it is desirable to grow more fruit, and especially more choice apples and pears, in this country. The question is, How to do it? Now, in my opinion, Mr. Rivers, in his speech as chairman of the Fruit Growers’ Conference held the other day in the Crystal Palace, went the right way to work to show how not to do it. Alluding to the obstacles to fruit-growing, he is reported to have said that landlords, land laws, railway rates, and middlemen have nothing to do with them. A more astounding assertion I have seldom read. In my opinion, they have pretty well all to do with them. It is our land laws which render fruit-planting an unsafe speculation, and high railway rates and a bad system of distribution (the middleman element) which render fruit-growing less profitable than it should be. I think my friend Mr. Albert Bath was on the right tack in the paper which he read at the first Crystal Palace Conference, and not Mr. Rivers, who declared ignorance to be the fundamental hindrance to extended fruit culture. No one is a more earnest advocate of agricultural and horticultural education than I am, and no one is less disposed to say anything to under-rate the advantages of either branch of instruction. But, in my opinion, for one cultivator of the soil prevented from growing fruit by ignorance, there are twenty who are deterred from lack of security to capital invested in planting, high railway rates, which render it unprofitable to grow anything except high-priced early produce if it has to go a long distance by rail, and our

abominable system of distribution, which gives more profit to the middleman for a day's, or sometimes for an hour's, work in handling fruit on to customers, than to the producer who spends a year in growing it.

Returning to the question, How is fruit-growing to be increased? I must pass by, as beyond the range of my subject, all details relating to such obstacles as high railway charges and the middleman's undue share in the amount paid by consumers for fruit. In considering how to answer the question asked, another at once crops up—Who is to plant? Now, our land laws are directly opposed to planting, as far as they go. By encouraging limited ownership through the settlement of estates they render it disadvantageous to most landowners to plant, because the limited owners, who form the great majority of the landlord class, by sinking their capital in orchard planting, would reap only a transitory benefit themselves, and that only if they lived several years, while they would enrich the already too highly-favoured heirs to their lands at the expense of their younger children or other relatives. For reasons which it would take me very wide of my mark to-day to state, I am not in favour of increasing the powers and privileges of the owners of land by making them absolute owners, and I allude to limited ownership merely to show that under it there is no reason to expect extensive orchard planting by landlords. We come now to the tenants, and are thus brought within the precise confines of the subject of this paper.

Mr. Rivers appears to argue that the land laws have nothing to do with the indisposition of cultivators to plant fruit, because in suitable situations and under proper management fruit-planting will pay with laws and rents as they are. No doubt it will, provided that the planter has a long lease and lives long enough to reap the fruits of his enterprise, or if—and this is a very large “if”—he can induce his landlord to consent to the planting, so that he will be entitled to compensation under the Agricultural Holdings Act, or to arrange otherwise to compensate him or his heirs when he quits his holding or dies. These “ifs” and “ors,” however, are shadowy particles, and a substantial and disagreeable “but” nearly always comes in to put them to flight. Without the consent of the landlord in writing, the law fails to afford the fruit-planter, whether he be a large farmer or an allotment holder, a halfpenny of compensation for capital sunk in the planting of fruit; and I doubt whether that consent can be obtained by one out of a hundred tenants. The tenant, then, has no legal security for fruit-planting, and if he plants without security, he incurs a very serious risk. It may be contended, perhaps, that a long lease affords sufficient security; but that I entirely dispute, because a man may die before he has reaped any benefit from his expenditure, and it may be inconvenient for his

executors to carry on his business, or he may be obliged to remove, either from getting into difficulties, or from some less disagreeable cause. Therefore a lease is but a delusion as security, unless it contains compensation clauses or embodies a right of consignment. Moreover, a lease never affords adequate security unless it is a very long one, even if the holder of it farms it out. Even then, at the end of the lease, the improving tenant—or rather, the law—hands over to the landlord property which rightly belongs to himself.

It is not necessary to say before my present audience that the expense of orchard planting is no light one, or to point out that some years must elapse before the planter can hope to obtain a satisfactory return on his outlay. Probably there is no gentleman here who could not tell me a great deal more about the cost of planting than I can tell him. But as there may be readers of this paper who are not experts, and who may like to have the estimates of experts on the cost of planting different kinds of fruit, I submit such estimates. There is no lack of them in print; but most of those in my possession are two, three, or more years old, and expenses vary with the times. I therefore asked Mr. Charles Whitehead to give me his estimate for the present time, and I have to thank him, a busy man—though for that matter, busy men are generally the most obliging in affording information—for kindly complying with my request. In giving Mr. Whitehead's estimates, I must point out that they do not include the cost of preparing the land, or any portion of the rent, tithe, rates, and labour expenses after planting which fall due before the trees come into profit.

COST OF PLANTING ONE ACRE OF FRUIT.

	£	s.	d.	£	s.	d.
Standard Apple Trees, 22 ft. apart (90 trees) ...	...	6	0	0		
Planting and staking ... ..	...	2	17	6		
					8	17
Plums or Damsons, 18 ft. apart (134 trees) ...	...	7	15	0		
Planting and staking ... ..	...	3	15	0		
					11	10
Apples and Plums mixed, 20 ft. apart (108 trees) ...	...	7	0	0		
Planting and staking ... ..	...	3	5	0		
					10	5
Bush Fruit Trees and Apples, 1,440 to the acre, 5½ ft. apart, at 13s. per 100 ... ..	...	9	0	0		
Planting bush trees ... ..	...	2	15	0		
90 apples, and planting and staking ... ..	...	8	17	6		
					20	12
Bush Fruit with Plums or Damsons—1,440 bush fruit trees ... ..	...	9	0	0		
Planting ditto ... ..	...	2	15	0		
134 Plum or Damson Trees, and planting and staking	...	11	15	0		
					23	10

	£	s.	d.	£	s.	d.
Strawberries, 30 in. × 18 = 11,616 plants, say 12s. 6d.						
per 1,000	7	4	3			
Planting	1	15	0			
					8	19 3
Strawberries, 30 in. × 12 = 17,424 plants, at 12s. 6d....	10	18	6			
Planting	2	7	6			
					13	6 0
Raspberries, in rows 4 ft. apart, 3 plants to a hill or centre = 10,890 plants	10	17	6			
Planting	2	5	0			
					13	2 6

Mr. Whitehead adds: "All these rates are according to present cost of fruit trees and present labour wages. The land, of course, must be deeply ploughed, and in many cases a subsoil plough should follow the ordinary plough. Harrowing also is necessary to get a level surface. Upon land in cultivation a good dressing of manure would be necessary, say 20 tons per acre. Some land would require trenching."

Mr. Albert Bath, of Sevenoaks, has also kindly sent me some estimates, which represent the actual cost of planting now being carried out under his superintendence.

COST OF MANURING, PLOUGHING, SUBSOILING, TREES, AND PLANTING
PER ACRE.

	£	s.	d.
Apple plantation, trees 20 ft. × 20 ft. apart	21	0	0
Plums, 20 ft. × 20 ft.	18	16	0
Pears, about same as apples... ..	21	0	0
Mixed plantation of Apples, Pears, Plums, 20 ft. × 20 ft., with bottom fruit—currants and gooseberries	35	8	0
Raspberries (manuring and cultivation as above, excepting subsoiling)	17	5	0
Strawberries, ditto	13	7	0

Mr. Bath remarks that fruit trees and raspberry canes are as cheap as they were six years ago, but that apple trees are in great demand, and will soon be dearer. Some growers, he also remarks, may prefer planting plums 10 ft. × 11 ft., and in that case the cost would be £34. 13s.

Although the planting of strawberries and raspberries does not come under the head of orchard planting, the estimates for these crops are allowed to appear in the list. I may add that Mr. William Vinson, of Orpington, Kent, has kindly given his estimates of the cost of planting of an acre of these varieties of soft fruit. Including the first year's cultivation, rent, rates, &c., he says, raspberries cost about £15 an acre, and strawberries about £10.

The veriest outsider must see from these figures—and especially from those relating to orchard planting—that it would be very risky for a tenant to engage in that enterprise without security as to compensation for the unexhausted value of his improve-

ments; and it is to be borne in mind that Mr. Whitehead's totals should be larger than they are, because they do not include additional expenditure incurred while waiting for the trees and bushes to bear.

How, then, should compensation be given? Personally, I am a strong advocate of the plan of allowing the tenant to sell his improvements in the market, with pre-emption to the landlord. Elsewhere, and on many occasions, I have shown how I would safeguard the just claims of landlords in making the necessary arrangements for free sale. There is not time to allow of my going into details upon that topic to-day. Moreover, to do so would be needless repetition, for are they not written in the chronicles of the Farmers' Alliance?—an association which would have done great things for the farmers and fruit growers of the country if they had sufficiently supported it. In my opinion, free sale is far superior to the valuation system. When told that it involves dual ownership in land, I always say, in reply, that where two persons invest their capital, and inextricably mix it, in the same piece of land, you must have dual ownership or confiscation. There is absolutely no other alternative; and if you have a right to compensation by valuation, you have dual ownership just as much as if you have free sale. Again, I am told that free sale has not succeeded in Ireland; but the reply to that is, that it was a splendid success in Ulster before Mr. Gladstone meddled with it, and, in my opinion, muddled it. Having visited Ulster, I say that the results of free sale there are wonderful. Considering the disadvantages in respect of situation, climate, and often of soil also, under which the farmers in that province laboured, what they did, stimulated by the security afforded to them by free sale, long before the Land Acts were passed, is a striking proof of the value of the principle.

It must be confessed, however, that free sale is not popular in this country. It may further be admitted that the system of compensation by arbitration and valuation can be carried out more satisfactorily in relation to fruit trees than in the case of ordinary farm improvements. The trees are on the ground, and can be counted and valued, and their condition indicates how they have been manured and otherwise treated. In some parts of Italy it is the practice to make an inventory of all the trees on a holding when the tenant enters, describing the number of trees of each kind in each enclosure, indicating the condition of the whole in general, if not of each, and valuing them. When the tenant quits, a similar inventory is made, and he is entitled to receive, or required to pay, any difference in the two valuations, according to whether he has caused appreciation or deterioration during his tenancy. Whether or not any allowance is made for natural improvement on the one hand, or

deterioration, similar to the reasonable "wear and tear" in a house, on the other, I cannot say. Perhaps some such plan could be adopted in this country.

The simplest reform, however—and I believe that fruit growers and farmers can get it if they will but act together—would be that of striking out the stipulation in the Agricultural Holdings Act which requires the landlord's consent to entitle the tenant to compensation for planting fruit trees and for other permanent improvements. But as I have always been a friend—an unappreciated friend—to landlords, I must state one objection to this proposal. It would be hard to come down upon a poor, embarrassed landlord, or upon one fairly well-to-do, but only a tenant for life, for £20 an acre or more on 100 or 200 acres, in the form of compensation to an outgoing tenant. Therefore, it seems to me that if the tenant is to be entitled to compensation for costly improvements made without his landlord's consent, the latter should have the option of presenting the right of free sale to the former. Or, perhaps, as landlords have always opposed free sale, it will be but a fitting lesson to them to make the amendment in the Agricultural Holdings Act just suggested, and to leave them to sue for free sale, which, I fancy, under the altered circumstances, many of them would very quickly demand. At any rate, in one way or another, I contend it is the right and the duty of the public to insist that the law of the land shall be so altered as to encourage instead of hindering the greatest profitable development of the resources of the soil. They should not recognise the right of a man who is allowed to "hold an estate in land"—the nearest approach to absolute ownership recognised by the law of this country—to keep it as a desert waste, or anything like a desert waste, if it will pay for improvement, and there are capitalists able and willing to improve it. Or, to limit the application of this principle of public right and duty to the subject before us, I say that the people of this country, desirous as they are to see planting increased, should insist on their representatives in Parliament, without unnecessary delay, so amending or adding to the statutes as to afford to every cultivator of the soil full security for the unexhausted value of any improvement in the planting and culture of fruit which he is able and willing to carry out.

DISCUSSION.

Mr. ROUPELL pointed out that the owner of land was not always an ogre, and might occasionally be expected to act with both common sense and consideration. Sometimes, however, the ownership vested in trustees, or in the guardians of infants, who had a very real difficulty in going outside the strict letter of the law, it was therefore very advisable that in any alteration of the law, it should be made to act automatically. The best

position, however, for anyone to be in, was to hold under an intelligent and enlightened landlord, who would go hand in hand with his tenant, and facilitate the transfer of improvements.

THE RAILWAY DIFFICULTY IN RELATION TO FRUIT, AND HOW TO DEAL WITH IT.

By Mr. D. TALLERMAN, F.R.H.S.

The railway difficulty and how to deal with it presents a social problem for solution of such immense magnitude, involving interests of so vast a character, that to justly determine it with due regard to the rights of all parties demands the most serious and earnest attention. On the one hand we have the enormous sum of £845,972,000 sterling invested as a paid-up railway capital in a movement ostensibly for the benefit of the public, which sum is entitled to a reasonably fair interest, while, on the other hand, the natural development of the resources of the nation are largely interfered with by the courses that have been followed by those having the control of the internal traffic incidental to the distribution of home-grown produce.

The full extent to which the agricultural classes as a body suffer by this course of procedure is beyond the scope of our present Conference, which, as far as possible, should be confined specially to the interests of fruit-growers.

That these may be clearly understood I have prepared a map of England and Wales, showing each county with its population, its total area, and the extent of that area devoted to fruit-growing and its allied industry, market gardening. The facts thus disclosed are of a most startling character, as they show that in the major portion of the country there is little or no fruit or green foods locally produced to supply the requirements of the people. There may be different opinions as to the cause or causes of this alarming condition of things, but there will be a consensus of opinion upon one point, which is, that the charges of our railways for the carriage of home-grown produce and the general arrangements for its transmission have been of such a nature and extent as to render the cultivation of these commodities unprofitable where it has been carried on, and to deter the extension of cultivation in other districts by reason of the want of facilities to despatch the produce when grown to centres of consumption for profitable sale, thereby failing to encourage the production of a supply of home-grown food for the people.

With every regard for the rights of investors to a legitimate interest upon their capital, the question must be removed from that comparatively narrow sphere of consideration to the far

ENGLAND AND WALES

1888.

POPULATION &
Comparative Area in each County
DEVOTED TO
MARKET GARDENS &
ORCHARDS.

POPULATION. — BLACK FIGURES

ORCHARDS. ●

MARKET GARDENS. ●

SHOWING THE INADEQUATE SUPPLIES OF
FRUIT & VEGETABLES IN MANY DENSELY
POPULATED DISTRICTS.

DESIGNED BY D. TALLERMAN, K.E.J. F.R.H.S

SCOTLAND

IRELAND

ISLE
OF
MAN

CORNWALL
330,686

DEVON
603,593

DORSET
191,028

SOMERSET
469,019

WILTSHIRE
258,965

HAMPSHIRE
593,470

SUSSEX
490,505

SURREY
1,436,899

MIDDLESEX
292,483

HERTFORD
203,069

BEDFORD
149,473

HUNTINGDON
59,491

NORFOLK
444,749

SUFFOLK
356,893

CAMBRIDGE
185,564

LINCOLN
469,919

NOTTINGHAM
391,815

DERBY
461,914

YORK
2,886,564

DURHAM
867,258

CUMBERLAND
250,647

NORTHUMBRIA
434,086

CHESHIRE
644,037

SHROPSHIRE
248,014

FLINT
80,354

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CARNARVON
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ANGLESEY
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MONTGOMERY
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MERIONETH
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wider one as to the duties that were imposed on the railways when the rights to construct their undertakings were conferred upon them.

There can be no misunderstanding on this point, for, leaving the general subject and dealing with it in its particular character, it will be found that every application to Parliament for a Bill to acquire land and construct a railway has been based upon the ground that it was for the public benefit that it should be granted.

Sight must not be lost of the fact that every Railway Act contains a schedule of the maximum tolls and rates that it is allowed to make for its services. But at the same time it should be borne in mind that a large number of the subsequent railway privileges were granted upon the assumption that there would be a legitimate competition for traffic within reasonable limits.

This result has certainly not been brought about, for it will be found that a most extraordinary condition of things exists with our railway system, as while there is the keenest possible competition among the principal lines to obtain the traffic, there is at the same time the strongest possible union amongst them as to the rates and charges they shall levy on that traffic.

The position of the metropolis in this matter is the most anomalous one conceivable, and will be discovered in the fact that it has been left to the eight railway companies that convey the daily food of its four million inhabitants, together with the Corporation, who conduct the markets so as to render them monopolies in the hands of a few favoured traders, to continue levying charges in the form of excessive rates, commissions, and middle-men's profits that are gigantic in proportion to the "octroi" collected on the boundaries of most continental cities, which we look upon as excessive, but which, in any event, is legitimately collected and expended as public money in the public service.

With us home-grown produce is, beyond all question, the food of the people for the people, and its economical and ready transmission from the fields of production to the centres of consumption is a matter that directly affects, for good or ill, producers and consumers. The excessive charges now made are found to so largely influence the welfare of the nation, that the question of railway rates has forced itself forward as a subject of general consideration.

The policy of the railway companies is both short-sighted and cruel; the former, because if farmers had the inducement to cultivate their lands, by the chance of a reasonable outlet, they would undoubtedly do so, and the railways would have the conveyance of the produce, which would furnish them with a large revenue from a source where they now receive nothing; the latter, because it is well known that the bulk of the money realised by home produce is expended in home labour, and the

whole of it remains in the country for re-expenditure, mostly in wages of other industries in some form or another.

But the most serious effect that this course of procedure has is the deprivation of the people of the large supply of vegetable and fruit foods that would be raised and available for consumption if the railways faithfully carried out the engagements made by them, upon the faith of which the privileges they now possess was accorded to them.

Meanwhile, good service may be done in another direction, which would, in any event, result in preventing the continual extension that is taking place of the condition of things from which we suffer. The great difficulty that presents itself in attempting to carry out any reform for the general good is the plea that is set up by the railway companies of the rights conveyed to them by their Acts of Parliament, which Acts they every year apply to have extended and increased. So large are the rights thus continually assigned to them, that in 1887 they required an addition to capital of no less a sum than £17,628,000 sterling; and it appears to be a very great oversight to allow these continual and large additions to be made to our railway system without making some provision for relief in the direction in which it is so urgently required. Granted that the railway companies have some rights in their existing Acts, that can be no reason why those conditions, which are now found to be detrimental to public interests, should be continued in the new Acts they apply for every successive session; on the contrary, the occasions should be utilised for obtaining some relief from our difficulties.

To enable arrangements of a beneficial character to be made, and ensure the establishment of a system that would render nugatory the efforts of the railway combination, and result in the establishment of reasonable rates for home-grown produce, it is advisable to pass such a general Act of Parliament as would enable local authorities to provide open spaces for use as markets, and to make connections with railways in their several districts, so that trucks with produce could be run direct into them, and their contents disposed of by the owners without incurring the cost of loading or unloading, and thus defeat the right to charge for terminals, unnecessary services, &c. Also to enable local authorities to make auxiliary lines or tramways in their several districts, such lines or tramways to be in connection with the railways, over which they should have running powers.

Collections of farm and garden produce would thereby gradually be formed from each area, and could be despatched by the producers to the markets, and be disposed of direct to the retailers or others.

A market of such a kind in each quarter of London would bring the whole agricultural population of the adjacent country

into direct communication with the consumer, and by being brought into communication with the existing system of tramways, the saving in the expense of cartage and delivery, which are at all times serious items in the cost of vegetable foods, would reach a total of several millions annually. Thus, not only would there be a considerable saving to the community, but at the same time a large amount of nutritive food would be brought within the reach of the working classes, of a better condition and fresher quality than they now receive, and the receipts of the agricultural classes would be largely increased.

It is an open question whether or not fruit growers have given any thought to the matter of railway rates and charges, and the conditions upon which their produce should be dealt with in future by those who conduct and control our inland traffic. The subject is not only of the utmost importance, but it demands their urgent and incessant consideration.

The outlet for fruits will be found in two directions, which have a widely different character and necessitate different treatment—the supply to London and the few very large towns in the north, and the supply to the small towns and villages throughout the kingdom. In the first we have the large concentration of fruiterers, greengrocers, and costermongers, who have hitherto furnished the means for reaching the public. In the second they have to a great extent done without fruit, as it could not be supplied in a fresh condition. Whether the fruit is intended for London or the country districts, railway companies should be compelled to provide effective refrigerator trucks for its conveyance, in order that its fresh condition may be fully maintained. Growers know the condition of the fruit when it leaves them, but they are not aware of the serious deterioration that takes place in transit before reaching its destination, and the consequent enormous depreciation that takes place in values. A few hours make a great difference in the appearance and flavour of fruit, and there can be no possible justification for the unnecessary loss thus caused to the grower, when the fruit could be readily and inexpensively delivered in a fine and fresh condition.

To ensure equitable arrangements in the matter of railway rates, so far as fruit growers are concerned, it is not only necessary, but of the utmost importance, to look into the various descriptions of traffic, and study the absolute conditions that are required to be complied with to effectively transfer their produce from the orchards to consumers with the least possible handling.

To convey coals, strawberries, iron, eggs, wood, meat, minerals, fish, and other articles of a widely distinctive character by the same trains, to a great extent in the same trucks, and deliverable by the same vans, and claim varying rates of payment, not according to the service rendered, but on the basis of

what the traffic will bear, is not only unreasonable, but in reality furnishes the railway companies with the power to indirectly levy a tax upon the food of the people, which they have exercised to a very great extent.

Had the companies, for the extra charges they have made, provided any of the additional accommodation or facilities that perishable goods require, either in transit or delivery, the additional charges might have been excused; but it has been an invariable rule of all the companies not to undertake any responsibility in respect to perishable goods, unless a special additional rate was paid. "Owner's risk" and "Company's risk" are terms well known to every consignor of produce. Many have often, to their cost, been advised that their goods arrived an hour late for market, or just after the market was over, and therefore made no price at all.

Thus, a special feature in this matter that fruit growers must bear in mind for traffic purposes is, that their especial produce is divided into two classes—the perishable and the non-perishable, and that these need different treatment. In connection with the former, in which soft fruits take a front rank, effective collection, safe transport, and speedy delivery are matters that require much greater consideration than even the actual rates charged; therefore I propose to direct attention to two points:—

First: What the railway companies should do in connection with perishable food transport.

Second: What they should charge for doing it.

Under these circumstances it will be wise for the fruit farmers to look upon themselves as one of the branches of our national agricultural industry, and determine the absolutely necessary conditions that are essential for the effective transport of their produce; at the same time those engaged in grazing, dairy farming, market gardening, and the other branches of agriculture should do the same, and then make a combined effort to obtain the facilities that are necessary for each, to enable them to profitably carry on their operations.

The traffic in home-grown perishable foods possesses a remarkable characteristic feature in being largely composed of comparatively small consignments. This is not only the necessary outcome of our system of production, but promises to largely increase with the growing tendency to small holdings, allotments, &c. This traffic should not only be encouraged, but every possible facility should be furnished to enable it to develop itself; for in that system will be found the means by which producers and consumers will naturally drift into more direct communication with each other. And it is to aid the growth of this condition of things that it is advisable for such provision to be made as will inherently develop a traffic by the facilities it

furnishes to producers for reaching the retailers in outlying districts.

In this matter, so far as fruit is concerned, facilities for its effective collection, safe transport, and speedy delivery are of a much greater consideration than the actual charge made for the services rendered, but this should certainly be a figure within reason; but the principal thing that the agricultural classes generally, as a body of producers, should seek to obtain, is a ready means for reaching consumers in all districts through the existing retail traders. For this purpose they should seek for the establishment of a "farm produce train"—a service to be carried out on the lines of the "parliamentary train" and the "van train," which was in existence for a number of years, and only recently abandoned. By the parliamentary train the passenger rate for one train daily was fixed by law. The van train was for parcels, and the rates were made by the railway companies themselves, being one-half the ordinary parcel rates, with a minimum of 6*d.* At the present time, a parcel traffic is in existence on all railways by passenger trains, and this is governed by radius of distance—up to thirty miles being $\frac{1}{4}$ *d.* per lb.; up to fifty miles $\frac{1}{2}$ *d.* per lb.; up to 100 miles $\frac{3}{4}$ *d.* per lb., with a minimum rate of 6*d.* for a parcel. A moderate extension of this parcel system to goods packages, with half a cwt. as a minimum, and with wider radius, on the basis of the van train charge—that is, one-half the current parcel rates—would prove advantageous to farmers, and bring the railway a large and remunerative traffic.

This should be sought for, and would probably be conceded by the railway companies without difficulty.

The time has arrived when, as a result of the protracted agitation upon which producers have been for years engaged, the subject is about to be dealt with by the Board of Trade, who have been appointed to act as arbitrators between the public and the railway companies.

It is therefore essential that the vast network of producers throughout the United Kingdom should, in their several and separate spheres, determine the actual requirements of their particular commodities, and then by united action place themselves in a position to approach the Board of Trade in a tangible and effective manner, so as to be able to put forward and substantiate simple and definite claims in every instance.

To this end the agricultural classes should, individually, collectively, and promptly study the subject in all its bearings, in order to see where their particular interest is affected, and how it may be remedied. Even then the contest is a most unequal one, for the railway companies are few in number, but united as one body, having an unlimited command of capital for their purpose, coupled with the best practical legal and com-

mercial experience that can be procured. They will also receive the indirect support of all the vested interests that have grown into existence with, and profit by, the present enormous importations of food products that now reach us from foreign countries.

And these combined forces will be confronted, so far as farmers are concerned, by a disunited, and consequently weak, body of individuals, without any representative organisation to determine what they should claim, and without means to take the necessary steps to contend for their views.

The question of station terminals is still an open one, and the railway companies will probably avail themselves of the opportunity and endeavour to surround all traffic with such conditions as will enable them to continue to levy the existing or similar charges on the goods placed with them for transport, while the farmers have not arrived at any definite conclusions as to what they require to improve their condition in this direction. The result may be anticipated from the position. Therefore, unless the course indicated is adopted, there is a strong probability that the present deplorable condition of things will, in a great measure, continue to exist for another long term of years, to the detriment of the great producing and consuming classes of the country.

To attain the desired end steps should at once be taken to prevent by legislation any extension of the present position, and Parliament should, immediately upon reassembling, be asked to pass a standing order that no Railway Act authorising the construction of any new lines or the extension of existing ones should be passed, unless a clause providing for a truck and train rate, a farm produce train, and the provision of refrigerator trucks, is embodied in it. This, in any event, and an amended schedule of rates, would stop further encroachments and lay the foundation of future legislation.

After referring to the existing difficulties, and what should be done in respect to them, the consideration of who is to do it follows as a natural sequence; and it will be evident that the most influential and effective representative that fruit-growers can secure, and one that would inspire confidence throughout the country, and be most likely to prove successful on their behalf, is the Royal Horticultural Society; and the Council of the Society, who have largely contributed to the success of this Conference, should be requested to nominate a Committee to act in this direction.

It now remains for me, in conclusion, to summarise the main points of my paper, and I do so by submitting—

1st. That the development of our fruit-growing industry has been retarded by the conduct of those having the control of the international traffic of the kingdom.

2nd. That, in addition to reasonable rates, facilities for effective collection, safe transport, and speedy delivery of all soft fruits are material elements for consideration.

3rd. That it is essential that these be provided for in all fresh Railway Acts that may be granted, and that no further addition or extension be made to any existing railway system until, as a consideration for such privilege, reasonable concessions are granted to public requirements.

4th. That the Council of the Royal Horticultural Society be requested to form a Committee to act on behalf of the fruit-growers of the United Kingdom, and that such Committee enlist the fullest possible amount of Parliamentary support to carry out its views.

Mr. SHIRLEY HIBBERD proposed the following resolution, which was seconded by Mr. JOHN CORNER:—

“That in view of the great public advantages that have accrued from previous Conferences held in these Gardens, and the marked success of the present one, members of the Executive Committee of this Conference, Fellows of the Royal Horticultural Society, and other Horticulturists here assembled, who are deeply interested in the Royal Horticultural Society's welfare, and in the important question of developing the progress of scientific and economical Horticulture, including especially the fruit-growing capabilities of the country, respectfully submit for the earnest consideration of the Council of the Society the desirability of concentrating the Society's resources to the utmost practicable extent upon the maintenance of the Chiswick Garden, so as to enable it to fulfil its mission as the national exponent of practical and experimental Horticulture.”

On a show of hands being taken, the resolution was carried with four only dissenting.

The Conference concluded with the usual votes of thanks to the Readers of Papers, to the Chairmen, to Mr. Barron, and to the Secretary of the Society.

A P P L E S.

PART II.

Statistical and other information relating to the
Cultivation of Apples in Great Britain and
Ireland.

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AND AT THE
APPLE AND PEAR CONFERENCE, 1888.

Those marked * were Exhibitors on both occasions.

Those marked † exhibited in 1888 only.

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 *Rivers & Son, Messrs. T., The Nurseries, Sawbridge-
 worth.
 Roberts, Mr. B. C., Oakfield, Chester.
 *Roberts, Mr. J., The Gardens, Gunnersbury Park, Acton,
 W.
 Roberts, Mr. W. P., Cuerden Hall Gardens, Preston.
 Robertson, Mr. W., Bourton Hall Gardens, Rugby.
 Robertson, Dr., Fern Bank House, Errol, N.B.
 Robinson, Mr. Joseph, Lewins, Edenbridge.
 Rogers, Mr. A. P., Furzebrook, Axminster.
 Rollo, Mr. W., The Gardens, Harleyburn, N.B.
 †Rose, Mr. J. H., Gardener to Lord Wantage, Lockinge
 Park, Wantage.
 *Ross, Mr. C., The Gardens, Welford Park, Newbury.
 †Roupell, Mr. W., Harvey Lodge, Roupell Park, S.W.
 Rowson Bros., Messrs., West Torrington Gardens, Wragby,
 Lincoln.
 *Royal Horticultural Society, Chiswick.
 *Rust, Mr. J., The Gardens, Eridge Castle, Tunbridge
 Wells.

- Salt, Mr. J., The Gardens, Aston Hall, Shifnal.
- *Saltmarsh & Sons, Messrs., The Nurseries, Chelmsford.
- †Sander, Mr., Gardener to J. East, Esq., Longstock House, Stockbridge, Hants.
- *Saunders, Mr. C. B., The Nursery, St. Helier's, Jersey.
- †Sclater, Mr. C. G., The Nurseries, Heavitree Bridge, Exeter.
- Scott, Mr. H., The Gardens, Abbotsford, N.B.
- Scott, Mr. J., The Nurseries, Merriott, Somerset.
- Selwood, Mr. T., The Gardens, Eaton Hall, Chester.
- Sharp, Mr. W., Prior Wood, N.B.
- Shepherd, Mr. H. A. Graham, Redwick, Port of Menteith, Stirling.
- Shingles, Mr. J., Gardener to Lord Hastings, Melton Constable.
- *Shingles, Mr. T., The Gardens, Tortworth Court, Gloucester.
- Shortt, Mr. T., Gardener to Sir E. G. Loder, Bart., Floore, Weedon, Northampton.
- Slater & Sons, Messrs., The Nurseries, Malton, Yorkshire.
- Smart, Mr. Chas. F., Rainham, Kent.
- Smith, Mr. J., The Gardens, Mentmore, Leighton Buzzard.
- †Smith, Mr. R., Gardener to Lady Frances Fletcher, Kenward, Yalding.
- *Smith & Co., Messrs. R., The Nurseries, Worcester.
- †Southall, Mr. T., South Bank, Worcester.
- Stacey, Mr. J., Seaford Grange, Pershore.
- Stevens, Mr. Z., The Gardens, Trentham Hall, Stoke-on-Trent.
- Styles, Mr. W., Brampton Bryan Hall, Hereford.
- Summers, Mr. G., The Gardens, Sandbeck Park, Rotherham.
- Taylor, Miss Watson, Oxford.
- Thomas, Mr. J., Gardener to Mrs. Drake, Bicester.
- †Thompson, Mr. G., Gardener to Messrs. W. & E. Wells, Croxby House, Hounslow.
- Thompson, Mr. G., The Gardens, Croxby House, Hounslow.
- Thompson, Mr. G., The Gardens, Littlemore, Oxford.
- Thompson, Mr. J., The Gardens, Eildonhall, N.B.
- Tidy, Mr. W., The Gardens, Stanmore Hall, N.
- Turner, Mr. C., Mostyn Hall Gardens, Flintshire.
- *Turner, Mr. C., Royal Nurseries, Slough.
- Twinberrow, Mr. J., Great Witley, Stourport.
- *Veitch & Sons, Messrs. James, The Nurseries, Chelsea, S.W.
- *Veitch & Sons, Messrs. R. T., The Nurseries, Exeter
- †Vertegans, Mr. R. H., Chad Valley Nurseries, Edgbaston.

CLASS I.

Fifty varieties of Apples most worthy of cultivation.

EXHIBITORS.

1. MESSRS. G. BUNYARD & Co., *The Nurseries, Maidstone, Kent.*

A very fine collection, all true to name, with tickets giving a great amount of useful information. The examples of Warner's King, Lord Suffield, Ribston Pippin, Stirling Castle, Ecklinville Seedling, The Queen, Cox's Pomona, Prince Bismarck, Lady Henniker, Blenheim Orange, Golden Noble, Beauty of Kent, &c., being wonderfully fine. Some examples of Emperor Alexander, which had been grown under glass, were very large and extremely beautiful.

2. MESSRS. T. BUNYARD & Co., *The Nurseries, Ashford, Kent.*

Harvey's Wiltshire Defiance, Beauty of Kent, Golden Noble, Waltham Abbey Seedling, Schoolmaster, Prince Albert, Cox's Orange, and a variety named Belle Joseph were the most noteworthy. A generally good sample.

3. MESSRS. CHEAL & SONS, *Lowfield Nurseries, Crawley, Sussex.*

A good collection, true to name. The examples of Pott's Seedling, Warner's King, Emperor Alexander, Lord Grosvenor, Ecklinville Seedling, and Stirling Castle were specially noted.

4. MESSRS. DICKSONS, Limited, *Nurserymen, Chester.*

This for a northern collection was considered remarkably good. The examples of Grenadier, Ringer (here named Bell Ringer) and others were extremely fine.

5. Mr. S. GRIFFIN, *Gardener to Baron de Rutzen, Slebeck Park, Haverfordwest.*

Fairly good. Some very fine examples of Adams's Pearmain, Gloria Mundi, Ecklinville Seedling, and Bess Pool.

6. MESSRS. LANE & SON, *The Nurseries, Great Berkhamstead.*

A fairly good collection; examples rather small. Those of Prince Albert, Baumann's Red Winter Reinette, Mrs. Barron, and Schoolmaster very fine.

7. MESSRS. C. LEE & SON, *The Nurseries, Hammersmith.*

Examples large and good. Those of Golden Noble, Lord Derby, Pott's Seedling, Stirling Castle, Dumelow's Seedling, Warner's King, Adams's Pearmain, &c., specially noted.

8. MESSRS. PAUL & SON, *The Old Nurseries, Cheshunt.*

A good collection. Some very fine examples of Cockle's Pippin, Grenadier, Stone's, Warner's King, Lord Suffield, Cox's Orange Pippin, Cheshunt Pippin, Ribston Pippin, and Cox's Pomona.

9. MESSRS. WILLIAM PAUL & SON, *The Nurseries, Waltham Cross.*

Examples clear and good. Some fine fruit of Mabbott's Pearmain, a very fine dessert apple, Cox's Pomona, Golden Spire, Hoary Morning, Stirling Castle, and Northern Spy.

10. Mr. W. G. PRAGNELL, *Castle Gardens, Sherborne, Dorset.*

Examples below average size for this district. A variety named Ducat was noted.

11. Mr. J. H. ROSE, *Lockinge Gardens, Wantage, Berks.*

Fruits small and below the average.

12. ROYAL HORTICULTURAL SOCIETY, *Chiswick.*

A good representative collection of medium size. The most noted examples being Golden Noble, Gascoigne's Seedling, Frogmore Prolific, Cox's Pomona, Yellow Ingestrie, Cellini, Stone's, and Baumann's Red Winter Reinette.

13. MESSRS. RIVERS & SON, *Nurseries, Sawbridgeworth, Herts.*

The greater part of the examples shown in this collection were grown under glass, and, therefore, presented a very striking appearance from their large size and delicate colouring. The following were specially noted: King of Tomkins Co., Ribston Pippin, Cox's Orange, Lady Henniker, Reinette de Canada, Warner's King, Mannington's Pearmain, Betty Geeson.

14. Mr. W. ROUPELL, *Roupell Park, S.W.*

This collection was remarkable as having been grown within the five mile London radius. The examples were both large and good. Specially noted: Peasgood's Nonesuch, The Queen, Grenadier, Annie Elizabeth, Stone's, Blenheim Orange, and King of the Pippins.

15. Mr. C. G. SCLATER, *The Nurseries, Heavitree Bridge, Exeter.*

A very fine collection, highly coloured. Blenheim Orange, Annie Elizabeth, Lady Henniker, and King of the Pippins noted.

16. Mr. C. TURNER, *The Royal Nurseries, Slough.*

A fairly good collection; examples rather under average; well and distinctly labelled, the cards stating the stock on which the fruit had been grown. Pott's Seedling, Ringer, Lord Derby, Blenheim Orange, Golden Noble, Mère de Ménage, Frogmore Prolific, Cellini, noted.

17. MESSRS. JAMES VEITCH & SONS, *Royal Exotic Nursery, Chelsea.*

Fruit grown at Langley, Bucks. One of the finest and most even collections staged, the following being specially noted: Winter Hawthornden, Lord Grosvenor, The Sandringham, Seaton House, Tyler's Kernel, Bismarck, Bramley's Seedling, Frogmore Prolific, Cellini, Cox's Orange Pippin, Cox's Pomona, Cockle's Pippin, Stirling Castle, Lady Henniker, Striped Beefing, Tom Putt, Warner's King.

18. Messrs. R. VEITCH & SON, *Nurserymen, Exeter.*

A nice even collection, Peasgood's Nonesuch being very fine, also a variety named Kentish Fillbasket, resembling the Catshead.

19. Mr. J. WATKINS, *Pomona Farm, Withington, Hereford.*

Examples large and remarkably highly coloured. Tyler's Kernel, Grenadier, Lord Grosvenor, Lord Suffield, Dumelow's Seedling were specially noted.

CLASS II.

Twenty-four dishes of Apples best adapted to the Exhibitors' district.

EXHIBITORS.

1. Messrs. G. BUNYARD & Co., *The Nurseries, Maidstone.*

Examples extra fine. Highly commended: Worcester Pearmain, New Hawthornden, The Queen, Cox's Orange, Tower of Glamis, Golden Noble.

2. Messrs. J. CHEAL & SONS.

Examples large and finely grown. Commended: Hormead's Pearmain, The Queen, Dumelow's Seedling, Duchess of Oldenburg. Pott's Seedling specially noted.

3. Mr. A. D. CHRISTIE, *Castle Gardens, Warwick.*

Moderately good. Adams's Pearmain, Cox's Orange Pippin, Blenheim Orange, Broad-eyed Pippin, Warner's King; Bess Pool being the most noted.

4. Mr. W. CHUCK, *The Gardens, Brodsworth Hall, Doncaster.*

Fruit small and much greener than most others.

5. Mr. T. COOMBER, *The Hendre Gardens, Monmouth.*

Examples fairly good, but deficient in colouring.

6. Mr. G. W. CUMMINS, *Gardener to A. H. Smee, Esq., Hackbridge, Surrey.*

A very fine collection, generally of high colour and clear skin. The following were noted: Cox's Pomona, Waltham Abbey Seedling, Striped Beefing, Nelson's Codlin, Court of Wick, Cox's Orange Pippin, Beauty of Kent.

7. Mr. W. H. FRETTINGHAM, *The Nurseries, Beeston, Notts.*

A very good collection, rather wanting in colour. The following were noted: Domino, Beauty of Herts, Lord Suffield, Ecklinville Seedling.

8. Mr. W. GALLOP, *The Gardens, Bradford Peverill, Dorchester.*

A good selection, examples rather small.

9. Mr. JOHN GARLAND, *The Gardens, Killerton, Exeter.*

A moderately good collection. The examples mostly highly coloured, although small.

10. Mr. GLEESON, *The Gardens, Clumber, Notts.*
Examples very good.
11. Mr. JOHN GREY, *Normanton Gardens, Stamford.*
Moderately good. A fine dish of Mère de Ménage noted.
12. Mr. C. HOWE, *The Gardens, Benham Park, Newbury.*
Examples small and not in good character.
13. Messrs. JEFFERIES & SON, *Nurserymen, Cirencester.*
An interesting collection containing good examples of the leading varieties.
14. Messrs. J. LAING & SON, *Nurseries, Forest Hill.*
Examples moderately good. Blenheim Orange, Lord Suffield, Emperor Alexander, Stirling Castle, Prince Bismarck, Warner's King, Gloria Mundi, specially noted.
15. Messrs. LANE & SON, *Berkhampstead.*
A good even lot of fruit. Blenheim Orange, Schoolmaster, Emperor Alexander, The Queen, Baumann's Red Winter Reinette, Ecklinville Seedling, specially noted.
16. Messrs. LUCOMBE, PINCE, & Co., *Nurserymen, Exeter.*
Moderately good examples throughout. Tibbet's Pearmain noted.
17. Messrs. WM. PAUL & SON, *Waltham Cross.*
Moderate size. Tower of Glamis, Warner's King, Golden Spire, Rostocker, Waltham Cross Seedling, Worcester Pearmain, noted.
18. Messrs. J. PEED & SONS, *Roupell Park Nurseries, Streatham.*
Examples large and well grown. Beauty of Kent, Worcester Pearmain, New Hawthornden, Peasgood's Nonesuch, Emperor Alexander, The Queen, and Washington being noted.
19. Mr. J. POWELL, *The Gardens, Ilington House, Dorchester.*
Examples even and moderately good. Manks' Codlin and Royal Pearmain noted.
20. Mr. J. ROBERTS, *The Gardens, Gunnersbury Park, Acton.*
A very meritorious collection, the examples large and well grown. Peasgood's Nonesuch very fine; also Alfriston, Lord Derby, Hawthornden, Mère de Ménage, Cox's Pomona, Claygate Pearmain.
21. ROYAL HORTICULTURAL SOCIETY, *Chiswick.*
Examples of fair size; wanting in colour. The following were noted: Yellow Ingestrie, Golden Noble, Gascoigne's Seedling, Baumann's Red Winter Reinette, Lord Suffield, The Queen, Stirling Castle.
22. Mr. J. RUST, *Gardener to the Marquis of Abergavenny, Eridge Castle, Tunbridge Wells.*
Examples moderately good. The following were noted: Betty Geeson, Hall Door, Roundway, Magnum Bonum, Crimson Queening, Wadhurst Pippin, White Paradise, Lady Henniker.

23. Messrs. SALTMARSH & SONS, *Nurserymen, Chelmsford, Essex.*

Moderately good examples. The Queen specially noted; also Cellini, Summer Orange, Emperor Alexander, Royal Russet, Cox's Orange, Cox's Pomona, Peasgood's Nonesuch.

24. Mr. T. SHINGLES, *Gardener to Earl Ducie, Tortworth Court, Gloucester.*

Examples large and well grown.

25. Messrs. R. SMITH & Co., *Nurserymen, Worcester.*

Examples of moderate size, well coloured. Hollandbury and Mère de Ménage noted as very fine.

26. Mr. R. SMITH, *The Gardens, Kenward, Yalding, Maidstone.*

Some very fine examples. Beauty of Kent, Winter Quoining, Reinette de Canada, Grand Duke Constantine, and Tom Putt specially noted.

27. Mr. T. SOUTHALL, *South Bank, Worcester.*

Moderately good, rather small.

28. Messrs. VEITCH & SONS, *Chelsea.*

The examples in this collection were exceptionally fine. Those of Pott's Seedling, Stirling Castle, Emperor Alexander, Mannington's Pearmain, Reinette de Canada, American Mother, noted.

29. Mr. A. WATERMAN, *The Gardens, Preston Hall, Aylesford, Kent.*

Examples large and well coloured, with clear skin. Gravenstein, Queen Caroline, Lady Henniker, Reinette de Canada, Stone's, Cox's Orange, were specially noted.

30. Mr. J. WATKINS, *Pomona Farm, Hereford.*

Remarkably highly-coloured examples throughout. Duchess of Oldenburg specially noted.

CLASS III.

Twelve varieties of Apples best adapted to the Exhibitors' district.

EXHIBITORS.

1. Mr. W. H. DIVERS, *Gardener to J. T. Hopwood, Esq., Ketton Hall, Stamford.*

Small but good examples; Carlton Seedling, Duke of Gloucester, and Golden Noble being the best.

2. Mr. J. HUDSON, *Gardener to H. J. Atkinson, Esq., Gunnersbury House, Acton.*

Examples of Golden Noble remarkably fine.

3. Mr. W. GALLOP.

4. Mr. R. MILNER.

5. Messrs. PAUL & SON, *Cheshunt*.
Examples well grown.

6. Messrs. J. VEITCH & SONS, *Chelsea*.
A wonderfully fine and well grown collection of fruit.

7. Mr. C. WARDEN, *Gardener to Sir F. Bathurst, Bart., Clarendon Park, Salisbury*.

The varieties staged in this class were in almost every instance repetitions of those exhibited in Classes I. and II., and, therefore, do not require any special notice.

CLASS IV.

Six varieties of Apples best adapted to the Exhibitors' district.

EXHIBITORS.

1. Mr. SIDNEY FORD.

2. Mr. GALLOP.
Examples very fine.

3. Messrs. VEITCH & SONS, *Chelsea*.

The examples of Prince Albert, Loddington Seedling, and Frogmore Prolific were extremely fine.

CLASS V.

Twelve varieties of Dessert Apples.

EXHIBITORS.

1. Mr. W. CRUMP, *Gardener to Earl Beauchamp, Madresfield Court, Great Malvern*.

A beautiful collection. Fruits finely grown, very highly coloured. Blenheim Orange, King of the Pippins, Cox's Orange Pippin, Strawberry, specially noted.

2. Mr. W. GALLOP.
Some fine examples of Devonshire Quarrenden.

3. Mr. J. POWELL, *Gardener to E. Brymer, Esq., Ilslington, Dorchester*.

Some examples of American Mother noted.

4. Messrs. J. PEED & SONS, *Roupell Park Nurseries, S.W.*

5. Messrs. SALTMARSH & SONS.

6. Mr. C. TURNER.

Some extra fine examples of Adams's Pearmain noted.

7. Messrs. J. VEITCH & SONS, *Chelsea*.
A very fine selection.
8. Messrs. R. VEITCH & SONS, *Exeter*.
9. Mr. A. WATERMAN, *Gardener to H. A. Brassey, Esq., Preston Hall, Aylesford*.

CLASS VI.

Twelve varieties of Culinary Apples.

EXHIBITORS.

Mr. W. CRUMP.

A very fine lot of fruit, highly coloured. Lane's Prince Albert Lord Derby, and Warner's King being specially noted.

2. Mr. W. H. FRETtingham, *The Nurseries, Beeston, Notts*.

Examples of Bramley's Seedling, Domino being specially noteworthy.

3. Mr. W. GALLOP.

4. Mr. J. ROBERTS.

Examples extra fine, especially Beauty of Kent, Cox's Pomona, Pott's Seedling, and Peasgood's Nonesuch.

5. Mr. C. TURNER.

6. Mr. A. WATERMAN.

Examples very good.

CLASS VII.

Six varieties of Dessert Apples.

EXHIBITORS.

1. Messrs. G. BUNYARD & Co.

Some fine examples of Melon Apple, Margil, and King of the Pippins were noted.

2. Mr. W. H. FRETtingham.

3. Mr. W. GALLOP.

4. Mr. J. HUDSON, *Gunnersbury*.

The examples of Gravenstein, Court of Wick, and Blenheim Orange were conspicuous.

5. Messrs. PAUL & SON, *Cheshunt*.

The examples of Cox's Orange Pippin, King of the Pippins and Worcester Pearmain very fine.

6. Mr. J. ROBERTS, *Gunnersbury*.

Moderately good.

7. Mr. C. B. SAUNDERS, *St. Helier's, Jersey.*

Examples very fine ; highly ripened. Those of Ribston Pippin and Pine Apple Russet specially so.

8. Messrs. VEITCH & SONS, *Chelsea.*

Examples of leading sorts very good.

9. Mr. C. WARDEN.

Moderately good.

CLASS VIII.

Six varieties of Culinary Apples.

EXHIBITORS.

1. Mr. J. CHEAL & SONS, *Crawley.*

2. Mr. W. H. FRETtingham.

3. Mr. W. GALLOP.

4. Messrs. VEITCH & SONS.

The examples throughout were good, and mostly of the leading sorts. Warner's King, Peasgood's Nonesuch, Blenheim Orange, &c.

CLASS IX.

Apples from Cordon, Bush, or Pyramid Trees (not to exceed twelve varieties).

EXHIBITORS.

1. Messrs. J. CHEAL & SONS.

2. Mr. J. GREY, *Gardener to Lord Aveland, Normanton Park, Stamford.*3. Mr. G. THOMPSON, *Gardener to Messrs. Wells, Croxby House, Hounslow.*4. Mr. J. WATKINS, *Pomona Farm, Hereford.*

The exhibits in this Class were not remarkable, and did not illustrate to any extent the object aimed at. Those marked as being grown on the bush trees were, if anything, the cleaner and finer. Messrs. Cheal showed some fine examples of Lady Sudeley from a cordon.

CLASS X.

Apples from Standards in Orchards (not to exceed twelve varieties).

EXHIBITORS.

1. Mr. R. DEAN, *Bedfont and Ealing.*2. Mr. B. GREAVES, *Gardener to F. Remington, Esq., Broome Hall, Holmwood.*

Mr. H. MERRYWEATHER.

Mr. G. THOMPSON.

Mr. J. WATKINS.

The examples contributed in this class were highly creditable, Mr. Dean staging some very fine Cox's Orange, Mr. Watkins Warner's King, and Mr. Merryweather remarkably fine fruit of Bramley's Seedling, Domino, and Clarke's Seedling.

CLASS XI.

Apples grown on Special Stocks, of which particulars had to be given (not exceeding twelve varieties).

EXHIBITORS.

1. Messrs. R. VEITCH & SONS, *Exeter*.

Examples sent were all from trees grafted on the English Paradise, which by themselves were of no value.

CLASS XII.

Apples as grown and sent to market, one peck of each (not exceeding twelve varieties).

This Class formed rather an attractive feature, and was found of great interest.

EXHIBITORS.

1. Messrs. G. BUNYARD & Co.

These were staged in neat shallow baskets, the samples being large, full of colour, and uniform in size. The sorts were Pott's Seedling, Cox's Orange, Stirling Castle, Baumann's Red Winter Reinette, Lord Suffield, Duchess of Oldenburg, Worcester Pearmain, Warner's King, Cellini, Ecklinville, Beauty of Kent, The Queen.

2. Mr. G. THOMPSON, *Gardener to Messrs. Wells, Hounslow*.

These were put up in the ordinary market style, in small round baskets with blue paper. The sorts were: Small's Admirable, Stirling Castle, Dumelow's Seedling, Warner's King, Alma Pippin, King of the Pippins, and Harvey's Wiltshire Defiance.

3. Messrs. PAUL & SON

Staged theirs in square shallow trays, which displayed the fruit well. The sorts were Claygate Pearmain, Dumelow's Seedling, Red Hawthornden, Yorkshire Beauty, Stirling Castle, Blenheim Orange, King of the Pippins, Fearn's Pippin.

CLASS XIII.

New, recently introduced, or little known varieties of merit.

The exhibits in this Class were not so striking or meritorious as might have been expected, and many that should have been entered as New, &c., were to be found among the Miscellaneous, and could not, therefore, be so readily compared. The descriptions of the greater number of these will be found in the "General Descriptive Catalogue," p. 295.

EXHIBITORS.

1. Messrs. GEO. BUNYARD & Co. sent *Akera*, a variety received from Sweden, the fruits of a uniform dull red colour, with pure white flesh, sweet and pleasant; *Cardinal*; *Opetien*, a large pale sort; *Belle Pontoise*; *Wealthy*, a new highly coloured American sort, likely to prove useful, resembling the *Snow Apple*; *Bismarck*, very handsome; and *Lady Sudeley*.

2. Messrs. T. BUNYARD & SON also sent *Akera* in fine character.

3. Messrs. J. CHEAL & SONS sent *The Professor*, a pretty, clear-skinned, culinary variety, *Ottershaw*, *Northern Dumpling*, *Bramley's Seedling*, *Lady Sudeley*, *Bismarck*.

4. Mr. W. CHUCK, *Brodsworth Hall, Doncaster*, sent *Charlestown Pippin*.

5. Mr. W. CRUMP, *Madresfield Court*, sent *May Queen*.

6. Mr. W. H. DIVERS, *Ketton Hall, Stamford*, sent *Carlton Seedling*, a large, pale-skinned fruit, resembling *Warner's King*.

7. Messrs. DICKSON & Co., *Edinburgh*.

8. Messrs. DRUMMOND & SONS, *Stirling*, sent *Cardross Green*, *Dunmore*, *Beauty of Menteith*, *Inchmahone*, and *Ochiltree*—all apparently good sorts for Northern districts.

9. Mr. M. DUNN, *Dalkeith*, sent *Cortes Apple* and *Annat Scarlet*.

10. Mr. W. FRETTINGHAM sent *Bramley's Seedling*, *Domino*, *Improved Northern Greening*, *Stent's Incomparable*, and *Clarke's Seedling*.

11. Messrs. R. B. LAIRD & SON, *Edinburgh*, sent *Lady Kinloch*, a very pretty, clear-skinned fruit, somewhat streaked, apparently well suited for Scotland.

12. Mr. G. W. CUMMINS, *Gardener to A. H. Smee, Esq.*, sent *Queensborough*, which greatly resembled *King of the Pippins*.

13. Messrs. W. PAUL & SON.

14. Messrs. PEARSON & SONS, *Chilwell Nurseries, Nottingham*, sent examples of *New Northern Greening*, a very fine late culinary variety.

15. Mr. C. PENNY, *Sandringham*, sent examples of a variety unnamed, greatly resembling Winter Pearmain.

16. Mr. C. ROSS, *Welford Park*, sent some fine examples of Evagil, Gospatrick, Lady Alice Eyre, Strange's Seedling, Baumann's Reinette.

17. Mr. C. G. SCLATER, *The Nurseries, Heavitree, Exeter*, sent Red-ribbed Greening, Hollow Core, Sweet Reinette.

18. Mr. T. SOUTHALL, *South Bank, Worcester*, sent May Queen, a very highly-coloured fruit.

19. Mr. CHARLES TURNER, *Slough*.

20. Messrs. J. VEITCH & SONS sent September Beauty, Domino, Tyler's Kernel, King Harry, Niton House, Bismarck, The Sandringham Ringer, Mrs. Barron, King of Tomkins County, Calville Boisbunel, and Castle Major, all very good examples.

21. Messrs. R. VEITCH & SONS sent several new sorts, amongst which may be named Smiling Beauty, Towsington, St. John's Favourite, Ottery, Red Peach, &c.

22. Mr. R. H. VERTEGANS, *Chad Valley Nurseries, Birmingham*, sent examples of the old Hall Door Apple, under the name of the New Weeping Apple.

CLASS XIV.

Miscellaneous.

EXHIBITORS.

1. Mr. W. ALLAN, *Gardener to Lord Suffield, Gunton Park, Norwich*, sent a collection of 28 varieties very well grown, the most noteworthy being Warner's King, Pott's Seedling, Gravenstein, and Peasgood's Nonesuch.

2. Mr. BALL, *Ramsden, Essex*, sent examples of Apple Blanders, a very distinct variety.

3. Mr. W. CHETTLEBURGH, *Gardener to Colonel Rous, Worsted House, Norwich*, sent six varieties of Apples of moderate character.

4. Colonel R. T. CLARKE, *Welton Place, Daventry*, sent fruit of a Wild Apple (Crab) found growing in the hedgerows. The fruits were of medium size, prettily flushed with crimson.

5. Mr. J. DAY, *Gardener, Galloway House, Garlieston, Scotland*, sent three varieties of Apples.

6. Mr. A DEAN, *Bedfont*, sent a collection of Apples.

7. Messrs. DICKSONS & Co., *Edinburgh*, a collection of 50 varieties of Apples of wonderfully good appearance, and highly meritorious. The following were specially noted: Stirling Castle, Ecklinville Seedling, Lord Suffield, Pott's Seedling, and Ochiltree,

a Scotch variety, of which good examples were shown from a tree stated to be 200 years old.

8. MESSRS. DICKSONS, Limited, sent a collection of about 40 varieties of average merit.

9. Mr. MALCOLM DUNN, *Dalkeith*, sent a collection of 70 varieties, very effectively and instructively labelled. Examples not large, and many badly bruised during transit; the most noteworthy were—Warner's King, Loddington Seedling, Lord Suffield, Alfriston, Worcester Pearmain, Cellini, Cox's Orange Pippin, Rosemary Russet, Cox's Pomona, and Annat Scarlet, a variety greatly resembling Devonshire Quarrenden.

10. Mr. W. T. T. DYER, *Royal Gardens, Kew*, sent examples of a few varieties to be named.

11. Mr. W. KING, *Dalzell Gardens, Motherwell, N.B.*, sent a collection of 25 varieties, amongst which were several of the old Scotch sorts.

12. Mr. McDONALD, *Perth, N.B.*, sent 10 varieties of apples from trees worked on the French Paradise; the specimens of fair size, clear skinned, and excellent. Peasgood's Nonesuch, Lady Henniker, Tower of Glamis, and Cox's Orange Pippin were very fine.

13. Mr. W. T. MANNING, *Ludgate Circus*, sent 8 varieties, amongst which Emperor Alexander and Golden Noble were prominent.

14. Mr. MARTIN, *Norwood*, sent a variety named Summer Orange.

15. Mr. HENRY MILLER, *Barrowgate Road, Chiswick*, sent a very fine apple, resembling Domino.

16. Mr. F. MOSS, *Didsbury, Manchester*, sent 6 sorts.

17. Mr. H. G. OCLEE, *Blickling Hall, Norfolk*, sent 36 varieties, very large, and remarkably well grown, specially noticeable being Gravenstein, Mère de Ménage, Peasgood's Nonesuch, Striped Beefing, and Warner's King.

18. Mr. C. B. SAUNDERS, *St. Helier's, Jersey*, sent beautiful examples of Ribston Pippin, Scarlet Nonpareil, Jacques Lebel, Golden Noble, and Pine Apple Russet, &c.

19. Mr. J. SHINGLES, *Gardener to Lord Hastings, Melton Constable*, sent 5 varieties, well grown.

20. Mr. R. SMITH, *Yalding*, sent Hyslop Crab.

21. Messrs. R. VEITCH & SONS, *Exeter*, sent examples of 21 sorts.

22. The Rev. W. WILKS, *Shirley Vicarage, Croydon*, sent some very large and remarkably handsome fruit of Cox's Orange Pippin from a tree in a pot.

LIST OF APPLES TO WHICH CERTIFICATES OF MERIT WERE AWARDED AS EXAMPLES OF CULTURE.

NAME.	EXHIBITOR.	NAME.	EXHIBITOR.
Adam's Pearmain ...	G. Griffin.	Duchess of Olden- burg ...	J. Watkins.
" ...	C. Turner.	Duchess of Olden- burg ...	J. Cheal & Sons.
Alexander ...	G. Bunyard & Co.	Ecklinville Seedling	G. Bunyard & Co.
" ...	J. Veitch & Sons.	" "	W. King.
Alfriston ...	M. Dunn.	" "	Dicksons & Co.
Alma Pippin ...	W. & E. Wells.	Egremont Russet ...	G. Bunyard & Co.
Annie Elizabeth ...	C. G. Selater.	" "	J. Cheal & Sons.
" "	W. Roupell.	Fearn's Pippin ...	C. Howe.
Baumann's Red } Reinette ... }	C. Ross.	Frogmore Prolific ...	J. Veitch & Sons.
Baumann's Red } Reinette ... }	J. Veitch & Sons.	Gascoigne's Seedling	Royal Horticult. Soc.
Beauty of Kent ...	T. Bunyard.	" Scarlet	G. Bunyard & Co.
" "	J. Roberts.	Golden Noble ...	J. Hudson.
Bismarck ...	G. Bunyard & Co.	" "	Royal Horticult. Soc.
" "	J. Veitch & Sons.	" "	T. Bunyard.
Blenheim Pippin ...	G. W. Cummins.	" "	C. Lee & Son.
" "	Saltmarsh & Sons.	Golden Spire ...	A. Waterman.
" "	C. G. Selater.	Gospatrik ...	C. Ross.
Bramley's Seedling	J. Cheal & Sons.	" "	G. Bunyard & Co.
" "	J. Veitch & Sons.	Gravenstein ...	A. Waterman.
" "	W. H. Frettingham.	" "	H. G. Oclee.
" "	H. Merryweather.	Grenadier ...	J. Watkins.
" "	R. Veitch & Son.	" "	Paul & Son.
Cellini ...	J. Veitch & Sons.	" "	W. Roupell.
" "	M. Dunn.	Herefordshire Beefing ...	J. Veitch & Sons.
Cockle's Pippin ...	Paul & Son.	Hormead's Pearmain	J. Cheal & Sons.
" "	J. Veitch & Sons.	" "	G. Bunyard & Co.
" "	H. G. Oclee.	Kerry Pippin ...	J. Jefferies & Son.
Court Pendu Plat ...	W. Crump.	King Harry ...	J. Veitch & Sons.
Cox's Orange Pippin	M. Dunn.	King of Tomkins County ...	T. Rivers & Son.
" "	Paul & Son.	King of the Pippins	W. Crump.
" "	T. Rivers & Son.	Lady Henniker ...	T. Rivers & Son.
" "	W. Crump.	" "	A. McDonald.
" "	R. Dean.	" "	C. G. Selater.
" "	W. Wilks.	Lady Sudeley ...	J. Cheal & Sons.
" "	A. McDonald.	" "	G. Bunyard & Co.
" "	A. Waterman.	Landsberger Reinette	Royal Horticult. Soc.
Cox's Pomona ...	J. Roberts.	Lane's Prince Albert	H. Lane & Son.
" "	G. W. Cummins.	" "	W. Crump.
" "	G. Bunyard & Co.	Loddington Seedling	J. Veitch & Sons.
" "	M. Dunn.	" "	M. Dunn.
" "	J. Hudson.	Lord Derby ...	C. Lee & Son.
Domino ...	W. H. Frettingham.		
" "	H. Merryweather.		

NAME.	EXHIBITOR.
Lord Derby ...	... W. Crump.
Lord Grosvenor ...	... J. Veitch & Sons.
" " ...	... J. Watkins.
Lord Suffield ...	... G. Bunyard & Co.
" " ...	... Dicksons & Co.
" " ...	... W. King.
" " ...	... W. H. Frettingham.
" " ...	... Paul & Son.
" " ...	... M. Dunn.
Mabbott's Pearmain	W. Paul & Son.
Mannington's } Pearmain }	... T. Rivers & Son.
Melon Apple ...	... G. Bunyard & Co.
Mère de Ménage ...	... J. Rust.
Mother ...	... A. Waterman.
" " ...	... J. Powell.
Mrs. Barron ...	... Royal Horticult. Soc.
" " ...	... J. Veitch & Sons.
New Hawthornden..	J. Peed & Sons.
" " ...	... G. Bunyard & Co.
New Northern } Greening }	... " "
New Northern } Greening }	... J. R. Pearson & Sons.
Northern Dumpling	J. Cheal & Sons.
Northern Greening } (improved) ... }	W. H. Frettingham.
Okera or Akera ...	... T. Bunyard.
" " ...	... G. Bunyard & Co.
" " ...	... J. Cheal & Sons.
Peasgood's Nonesuch	W. Roupell.
" " ...	... R. Veitch & Sons.
" " ...	... A. Waterman.
" " ...	... J. Roberts.
" " ...	... H. G. Oclee.
Potts' Seedling ...	... J. Veitch & Sons.
" " ...	... J. Roberts.
" " ...	... J. Jefferies & Son.
" " ...	... Dicksons & Co.
" " ...	... C. Lee & Son.
Reinette de Canada	T. Rivers & Son.
Ribston Pippin ...	... G. Bunyard & Co.
" " ...	... T. Rivers & Son.
" " ...	... R. Milner.
" " ...	... W. King.
" " ...	... C. B. Saunders.
Rosemary Russet ...	... M. Dunn.
Scarlet Nonpareil ...	... C. Turner.

NAME.	EXHIBITOR.
Scarlet Pearmain ...	J. Veitch & Sons.
Schoolmaster... ..	T. Rivers & Son.
" " ...	J. Veitch & Sons.
Seaton House... ..	" "
Small's Admirable...	J. Laing & Sons.
Stirling Castle ...	W. King.
" " ...	Dicksons & Co.
" " ...	J. Veitch & Sons.
" " ...	C. Lee & Son.
" " ...	G. Bunyard & Co.
" " ...	A. Waterman.
Stone's ...	Paul & Son.
Striped Beefing ...	H. G. Oclee.
The Queen ...	J. Cheal & Sons.
" " ...	G. Bunyard & Co.
" " ...	W. Roupell.
" " ...	Saltmarsh & Sons.
The Sandringham...	J. Veitch & Sons.
Tibbett's Incom- parable ... }	G. Bunyard & Co.
Tibbett's Pearmain	Lucombe, Pince & Co.
" " ...	C. G. Sclater.
Tower of Glamis ...	A. McDonald.
Tyler's Kernel ...	J. Veitch & Sons.
" " ...	J. Watkins.
" " ...	G. Bunyard & Co.
Warner's King ...	G. W. Cummins.
" " ...	Paul & Son.
" " ...	T. Rivers & Son.
" " ...	A. Waterman.
" " ...	J. Cheal & Sons.
" " ...	G. Bunyard & Co.
" " ...	J. Watkins.
" " ...	H. G. Oclee.
" " ...	M. Dunn.
" " ...	W. Crump.
Wellington ...	J. Cheal & Sons.
" " ...	J. Laing & Sons.
" " ...	R. Smith & Co.
" " ...	C. Lee & Son.
WinterHawthornden	J. Veitch & Sons.
Worcester Pearmain	J. Cheal & Sons.
" " ...	G. Bunyard & Co.
" " ...	A. Waterman.
" " ...	H. Merryweather.
" " ...	M. Dunn.
Yellow Ingestrie ...	Royal Horticult. Soc.

AUDIT OF THE APPLES EXHIBITED AT THE CONFERENCE, 1888.

Name.	No. of Dishes.
Warner's King, 76; <i>syn.</i> Cobbett's Fall Pippin, 2 ...	78
Blenheim Orange, 62; <i>syns.</i> Blenheim Pippin, 8; Beauty of Hants, 4 ...	74
King of the Pippins, 69; <i>syn.</i> Golden Winter Pearmain, 2...	71
New Hawthornden, 33; <i>syns.</i> Winter Hawthornden, 12; Hawthornden, 19; Red Hawthornden, 3 ...	67
Dumelow's Seedling, 34; <i>syns.</i> Wellington, 30; Normanton Wonder, 1 ...	65
Cox's Orange Pippin ...	64
Ribston Pippin ...	54
Cox's Pomona ...	53
Stirling Castle ...	53
Cellini ...	52
Ecklinville Seedling, 31; <i>syns.</i> Ecklinville Pippin, 5; Ecklin- ville, 16 ...	52
Emperor Alexander, 29; <i>syn.</i> Alexander, 17 ...	46
Worcester Pearmain ...	41
Lane's Prince Albert, 24; <i>syn.</i> Prince Albert, 9 ...	33
Alfriston ...	32
Peasgood's Nonesuch ...	32
Beauty of Kent ...	30
Lord Derby ...	30
Golden Noble ...	29
Pott's Seedling ...	29
Tower of Glamis... ..	29
Gloria Mundi, 26; <i>syn.</i> Belle Dubois, 2 ...	28
Keswick Codlin ...	28
Mère de Ménage... ..	27
Duchess of Oldenburg, 23; <i>syn.</i> Borovitsky, 1 ...	24
Annie Elizabeth ...	23
Small's Admirable ...	23
Fearn's Pippin ...	22
Gravenstein ...	22
Lord Grosvenor, 19; <i>syn.</i> Jolly Beggar, 3 ...	22
Manks' Codlin ...	22
Stone's Apple, 13; <i>syn.</i> Loddington Seedling, 9 ...	22
Golden Spire ...	21

Name.	No. of Dishes.
Lady Henniker	21
Grenadier	20
Sturmer Pippin	20
Reinette de Canada	19
The Queen, 12; <i>syn.</i> Queen, 6	18
Dutch Mignonne, 17; <i>syn.</i> Reinette de Caux, 1	18
Northern Greening	17
Hollandbury	16
American Mother, 9; <i>syn.</i> Mother, 6	15
Frogmore Prolific	15
Kerry Pippin	15
Cockle's Pippin	14
Schoolmaster	14
Adams' Pearmain	13
Bedfordshire Foundling	13
Bramley's Seedling	13
Devonshire Quarrenden, 9; <i>syns.</i> Red Quarrenden, 3; Quarrenden, 1	13
Duke of Devonshire	13
Queen Caroline, 11; <i>syn.</i> Spencer's Favourite, 2	13
Rosemary Russet	13
Baumann's Red Winter Reinette, 11; <i>syn.</i> Reinette Baumann, 1	12
Claygate Pearmain, 11; <i>syn.</i> Ribston Pearmain, 1	12
Court of Wick	12
Court Pendu Plat	12
Royal Russet	12
Tom Putt... ..	12
Yorkshire Greening	12
Domino	11
Hanwell Souring	11
Yorkshire Beauty	11
Scarlet Nonpareil	10
Winter Queening	10
Yellow Ingestrie, 8; <i>syn.</i> Summer Golden Pippin, 2	10
Catshead	9
Cornish Aromatic	9
Mannington's Pearmain... ..	9
Margil	9
Norfolk Beefing	9
Striped Beefing	9
Betty Geeson	8
Braddick's Nonpareil	8
Hambledon Deux Ans, 7; <i>syn.</i> Deux Ans, 1	8
Hawthornden, Old	8
Kentish Fillbasket	8
Lemon Pippin	8

Name.	No. of Dishes
Melon Apple	8
Bess Pool... ..	7
Brabant Bellefleur, 5; <i>syn.</i> Bellefleur Brabant, 2 ...	7
Herefordshire Pearmain	7
Maltster	7
The Sandringham	7
Waltham Abbey Seedling	7
Downton Pippin... ..	6
Flower of Kent	6
Hoary Morning	6
Hormead Pearmain	6
Nonesuch... ..	6
Prince Bismarck	6
Ringer	6
Round Winter Nonesuch	6
Tibbet's Pearmain, 3; <i>syn.</i> Tibbet's Incomparable, 3 ...	6
Wadhurst Pippin	6
Washington	6
Brownlee's Russet	5
Forge	5
Golden Pippin	5
Golden Reinette... ..	5
New Northern Greening	5
Old Nonpareil	5
Winter Peach	5
Atkins' Seedling... ..	4
Caraway Russet	4
Duchess's Favourite, 3; <i>syn.</i> Duchess of York, 1 ...	4
Egremont Russet	4
Herefordshire Beefing	4
Mrs. Barron, 3; <i>syn.</i> Large American, 1 ...	4
Pearson's Plate	4
Rymer	4
Scarlet Pearmain	4
Tyler's Kernel	4
Akera	3
Barchard's Seedling	3
Boston Russet	3
Cornish Gilliflower	3
Dutch Codlin	3
Forfar Pippin	3
Gascoigne's Seedling	3
Gipsy King	3
Grand Duke Constantine	3
Hall Door	3
Harvey's Wiltshire Defiance	3
Keddeston Pippin	3

Name.	No. of Dishes.
King Harry	3
London Pippin	3
Lord Burghley	3
Nanny	3
Northern Dumpling	3
Northern Spy	3
Norfolk Bearer	3
Pineapple Russet	3
Stackpool... ..	3
Summer Orange... ..	3
Winter Pearmain	3
Wyken Pippin, 2 ; <i>syn.</i> Warwickshire Pippin, 1	3
Alma Pippin	2
Beauty of Waltham	2
Beauty of Wilts	2
Burchardt's Reinette	2
Cambusnethan Pippin	2
Carlisle Codlin	2
Cobham	2
Colonel Harbord... ..	2
Crimson Queen	2
Devonshire Queen	2
Doctor Harvey	2
Evagil	2
Galloway Pippin... ..	2
Gospatrik	2
Grange's Pearmain	2
Green Pippin	2
Hick's Fancy	2
Jefferson	2
Lady Sudeley	2
Lamb Abbey Pearmain	2
Lord Paulett's Pearmain	2
Magnum Bonum... ..	2
Nelson's Codlin	2
Nelson's Glory	2
Newtown Pippin... ..	2
Old English Codlin	2
Orange Pippin	2
Pigeonette	2
Pitmaston Russet Nonpareil	2
Red Bough	2
Reinette Van Mons	2
Royal Somerset	2
Russet Pippin	2
Seaton House, 1 ; <i>syn.</i> Niton House, 1	2
Strawberry Pippin	2

Name.	No. of Dishes.
Syke House Russet	2
Thorle Pippin	2
Twenty Ounce	2
Warner's Seedling	2
Wheeler's Russet	2
Winter Strawberry	2
Withington Fillbasket	2
Woodley's Favourite	2
Wormsley Pippin	2
Abbé Soger	1
Annat Scarlet	1
Annie's Kernel	1
Alphington	1
Archduke Antoine	1
Ashmead's Kernel	1
Astrachan	1
Autumn Pearmain	1
Barnack Beauty	1
Baxter's Favourite	1
Beauty of Moray	1
Belle Bonne	1
Belle Gloire	1
Belle Josephine	1
Belle Pontoise	1
Benoni	1
Bishop's Hero	1
Blanders	1
Brickley Seedling	1
Bristol Apple	1
Brown's Codlin	1
Buckingham	1
Cardinal	1
Carlton Seedling	1
Carse o'Gowrie	1
Caldwell	1
Calville Boisbunel	1
Calville Malingre	1
Calville Rouge Précoce	1
Calville St. Sauveur	1
Castle Major	1
Cheshunt Pippin	1
Clarke's Seedling	1
Cluster Golden Pippin	1
Colonel Vaughan	1
Cornish Costard	1
Cortes Apple	1
Crown Apple	1

Name.	No. of Dishes.
Curltail ...	1
Dartmouth Crab...	1
Doctor Hogg ...	1
Doux Argent ...	1
Dredge's Emperor ...	1
Dredge's Fame ...	1
Duke of Beaufort ...	1
Duke of Gloucester ...	1
Early Nonpareil ...	1
Egg Apple ...	1
Eldon Pippin ...	1
Eve Apple ...	1
Fall Pippin ...	1
Fletcher's Seedling ...	1
French Crab ...	1
Friar's Pippin ...	1
Fullwood ...	1
Golden Ball ...	1
Golden Harvey ...	1
Golden Knob ...	1
Golden Monday ...	1
Golden Pearmain ...	1
Golden Russet ...	1
Goodenough Nonesuch ...	1
Gooseberry Pippin ...	1
Glory of the West ...	1
Graham Russet ...	1
Grand Sultan ...	1
Greaves' Pippin ...	1
Hall Door ...	1
Henri Decaisne ...	1
Hubbard's Pearmain ...	1
Hughes' Golden Pippin...	1
Hunthouse ...	1
Hyslop Crab ...	1
Inchmahone ...	1
Incomparable ...	1
Irish Peach ...	1
Irish Pitcher ...	1
Jacques Lebel ...	1
Jetofsky ...	1
Kentish Broading ...	1
Kentish Orange Goff ...	1
King of Tomkins County ...	1
Kingston Pippin... ..	1
Kirke's Fame ...	1
Lady Alice Eyre... ..	1

Name.	No. of Dishes.
Lady Apple	1
Lady Kinloch	1
Landsberger Reinette	1
Leicester Burton Pippin	1
Lewis's Incomparable	1
Liver's Imperial	1
Long-stemmed Pippin	1
Longville's Kernel	1
Lord Lennox	1
Marigold	1
May Queen	1
Melrose	1
Minchall Crab	1
Missouri Pippin	1
Moss's Incomparable	1
Nelson	1
Newland's Sack	1
Ochiltree	1
Old Orange Pippin	1
Oslin	1
Ottershaw	1
Ottery	1
Peck's Pleasant	1
Pinder Apple	1
Pitmaston Russet	1
Pomme Royale	1
Pounds	1
Prince's Pippin	1
Quatford Aromatic	1
Red Astrachan	1
Red Autumn Calville	1
Red Julien	1
Red Peach	1
Reinette Grise	1
Reinette Grise d'Automne	1
Reinette Rambour de Melcher	1
Remborough	1
Ross Nonpareil	1
Rostocker	1
Rougemont	1
Royal Codlin	1
Royal Jubilee	1
Rushock Pearmain	1
Russet Pearmain	1
Russian Transparent	1
St. Lawrence	1
Scarlet Admirable	1

Name.	No. of Dishes.
Scotch Bridget	1
Sharleston Pippin	1
Sharper's Apple	1
Silver Saturday	1
Sir John's Favourite	1
Smart's Prince Arthur	1
Smith's Pippin	1
Spring Ribston	1
Stamford Pippin... ..	1
Stent's Incomparable	1
Stoup Leadington	1
Strange's Seedling	1
Sugar Loaf Pippin	1
Summer Nonpareil	1
Sweedish Reinette	1
Sweet Reinette	1
Tewkesbury Baron	1
The Professor	1
Transparent	1
Trumpington	1
Uncle Barney	1
Waltham Cross	1
Wareham Russet	1
Wealthy	1
Welford Park Nonesuch	1
White Calville	1
White Paradise	1
Wippel's Seedling	1
Worcester Fillbasket	1

GROUP I.

SOUTHERN COUNTIES.

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BERKSHIRE.*Exhibitors.*

- 1.—Mr. W. S. CAMPBELL, *Cowarth Park, Sunningdale, Ascot.*

Exhibitor's Remarks.—Grown on Standards and Espaliers, grafted chiefly on the Paradise. Situation sheltered. Soil, a light sandy loam ; subsoil, sand and gravel.

- 2.—Mr. T. JONES, *Royal Gardens, Frogmore.*

Exhibitor's Remarks.—The specimens not quite so large as usual, owing to the greater number of the trees having been lifted last winter. The majority of the trees were planted by the late Mr. Ingram, so they are now getting old.

- 3.—Mr. S. MORTIMER, *Purley Park, Reading.*

Exhibitor's Remarks.—Some of the trees are very old Standards, which bear abundantly, but we get our choicest fruit from bushes that have been planted about eight years. Some of them are grafted on the Paradise, some on the Crab. Situation, in a valley entirely surrounded with tall trees. Soil, a light shallow loam, on a gravelly subsoil. A good many of the better kinds canker badly, for example, Lord Suffield. Cellini bears well, but the fruit is always very small ; but no Apples grow very fine on this thin soil.

- 4.—Mr. C. ROSS, *Gardener to Charles Eyre, Esq., Welford Park, Newbury.*

Observations.—A remarkably fine, well grown lot, specimens of good size, very clear skinned.

Exhibitor's Remarks.—Three-fourths of the trees are grown in Bush form, the average age being about 12 years. The other part consists of Standards of about 21 years standing. Keswick Codlins, Northern Greening, and a few others are 60 years old. The Bush trees are on Paradise, the Standards on Crab. Situation is exposed to the north-east, with no shelter except a very few trees. Soil, old garden over 200 years in cultivation ; subsoil gravelly. The sorts named are those which are most to be depended on for a crop, within a radius of 7 miles from here. Some of them do not always bear in this garden, for many sorts

canker as soon as their roots get into the subsoil. To keep the trees healthy they require to be planted shallow, and top-dressed every two years, with a mixture of fresh loam and old manure.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Worcester Pearmain, Cox's Orange Pippin, Blenheim Orange, King of the Pippins, Margil, Baumann's Reinette, Mannington's Pearmain, Cockle's Pippin, Cornish Aromatic, Sturmer Pippin, Keswick Codlin, Gospatrick, Ecklinville Seedling, Loddington, Stirling Castle, Lane's Prince Albert, Lord Derby, Mère de Ménage, Brabant Bellefleur, Betty Geeson, Dumelow's Seedling, Annie Elizabeth, Northern Greening.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Worcester Pearmain, Cox's Orange Pippin, Blenheim Orange, Mannington's Pearmain, Cornish Aromatic, Sturmer Pippin, Keswick Codlin, Ecklinville Seedling, Stirling Castle, Lane's Prince Albert, Annie Elizabeth, Northern Greening.

5.—Mr. J. H. ROSE, *Lockinge Gardens, Wantage*.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Lord Suffield, Devonshire Quarrenden, Irish Peach, Berkshire Glory, Fearn's Pippin, Warner's King, Beauty of Hants, Beauty of Kent, Golden Noble, Bess Pool, Alfriston, Cox's Pomona, Grenadier, Cellini, King of the Pippins, Blenheim Orange, Scarlet Russet, Hanwell Souring, Catshead, Yorkshire Beauty, Lemon Pippin, Wellington, French Crab, Jacks'.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Lord Suffield, Fearn's Pippin, Beauty of Kent, Alfriston, Cellini, King of the Pippins, Blenheim Orange, Hanwell Souring, Lemon Pippin, Wellington, French Crab, Jacks'.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Keswick Codlin, Lord Suffield, Berkshire Glory, Fearn's Pippin, King Pippin, Blenheim Orange, Hanwell Souring, Lemon Pippin, Wellington, French Crab. These sorts are largely grown here.

Some orchards very exposed, others partly sheltered. Soil, rather light, resting on chalk.

GENERAL REMARKS.

Mostly all trees in this district are on the Crab stock, and grown as Standards on grass, which is mown, and fed off by sheep and cattle. Orchards are fairly attended to, as to keeping the centres of the trees open, all dead and useless wood being cut out, old sorts being discarded, and grafting and planting the sorts most in demand for the markets, by the more energetic fruit growers.

Varieties of Apples suitable for Cultivation in Berkshire.

SELECTED (1883) BY MR. S. MORTIMER, *Purley Park*, AND
MR. C. ROSS, *Welford Park*.

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cockle's Pippin . . .	2	Duke of Devonshire . .	1
Cox's Orange Pippin . .		Fearn's Pippin . . .	
King of the Pippins . .		Lord Burghley . . .	
Margil		Mannington's Pearmain	
Ribston Pippin		Pine Apple Russet . .	
Astrachan, Red	1	Pine Golden Pippin . .	
Blenheim Orange . . .		Pitmaston Russet . .	
Claygate Pearmain . .		Sturmer Pippin . . .	
Cornish Aromatic . . .		Worcester Pearmain . .	
Devonshire Quarrenden			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Alfriston	2	Keswick Codlin	1
Brabant Bellefleur . .		Lane's Prince Albert .	
Annie Elizabeth . . .	1	Loddington Seedling .	
Bedfordshire Foundling		Lord Derby	
Bess Pool		Mère de Ménage . . .	
Betty Geeson		Northern Greening . .	
Blenheim Orange . . .		Stirling Castle	
Cox's Pomona		Waltham Abbey	
Dredge's Fame		Seedling	
Ecklinville Seedling . .		Wellington (Dume-	
Emperor Alexander . .		low's Seedling) . . .	
Hambledon Deux Ans .			

HAMPSHIRE.

Exhibitors.

1.—Mr. HENRY MARTIN, M.D., *The Lodge, East Cosham.*

Observations.—Fair examples; those of Gloria Mundi very large.

2.—Mr. J. MORRIS, *The Lodge, Sherwood, Winchfield.*

Observations.—Very fine examples of Hollandbury.

3.—Dr. WAY, *Cambrian House, Landport.*

Observations.—Fairly good fruit. Rosemary Russet very fine.

Exhibitor's Remarks.—Grown on Standard trees about 20 years old. Situation, in a walled garden, sheltered, close to the sea. Soil, gravelly.

KENT.

Exhibitors.

1.—Mr. G. BEATON, *Yotes Court, Mereworth, Maidstone.*

Observations.—Fruit of fair average quality.

Exhibitor's Remarks.—The greater part of our trees are Standards, a few Bush form, and mostly old. Situation, where grown on a high level, well exposed. Soil, good, light, and clayey to

a great depth. Cox's Orange Pippin, in this district, is very liable to canker, scarcely a tree being clear, yet it bears enormously, and is planted extensively. Margil is not very generally grown, yet, where it is, it always bears a good character. Cornish Gilliflower is even a greater favourite as a late dessert Apple. For kitchen use, Winter Quoining is much grown here, and bears very well. Wellington (Dumelow's Seedling) is being largely planted in this district, but a great many object to it as a cropper. Gooseberry Apple, named Golding now, is an indispensable variety, keeping long into summer. It will indeed keep for nearly two years, but it is not grown to any extent. Round Winter Nonesuch is one of the best, as it never fails to crop, whether it be a good season or bad. Forge Apple is very good, though not a general favourite. The Apples named are general favourites, and recommended to be planted for market use.

2.—Messrs. GEORGE BUNYARD & Co., *Nurserymen, Maidstone.*

Observations.—A very complete and representative collection of the Apples cultivated in Kent. Fruit of fair size.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR GARDEN CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Devonshire Quarrenden, Lord Suffield, King of the Pippins, Grenadier, Loddington, Ribston Pippin, Peasgood's Nonesuch, Cox's Orange Pippin, Mother, Blenheim Orange, Orange, Ross Nonpareil, The Queen, Warner's King, Lord Derby, Braddick's Nonpareil, Gascoigne's Seedling, Golden Noble, Beauty of Kent, Lane's Prince Albert, Wellington, Annie Elizabeth, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR GARDEN CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Devonshire Quarrenden, Lord Suffield, Grenadier, Margil, Mother, Peasgood's Nonesuch, Cox's Orange, Warner's King, Beauty of Kent, Blenheim Orange, Gascoigne's Seedling, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Early Julien (largely), Lord Suffield (largely), Yellow Ingestrie (locally), Worcester Pearmain (a favourite), Loddington (grafted on old trees), Counsellor (largely in Mid Kent), King of the Pippins (many acres), Blenheim Orange (largely in old orchards), Wellington (extensively), Winter Quoining (in heavy lands).

Exhibitor's Remarks.—Grown on Standard trees, 25 to 30 years old, in sheltered orchards or nursery, and on Pyramids, from 3 to 7 years old, in open nursery quarters. The Standards are grafted on the Crab, and the Pyramids on Broad-leaved and Nonesuch Paradise. Soil, a sandy loam, resting on the Kent ragstone (Upper Green-sand).

3.—Mr. W. CHISHOLM, *The Gardens, Oxon Heath, Tonbridge.*

Observations.—Examples large, and of uniformly fine quality.

Exhibitor's Remarks.—Grown on Espaliers and Bush trees, 4 years of age, 3 years grafted when planted, and all on the Paradise. Situation where they are grown is within a walled garden. Soil, a heavy loam, on a clay subsoil. In planting young Apple trees I do not find it advisable to use manure; but its application two or three years afterwards is, in a decomposed state, most beneficial.

4.—Mr. W. DIVERS, *The Gardens, Wierton House, Maidstone.*

Exhibitor's Remarks.—Some grown on Standards about 50 years old; others on Bush trees planted about 12 years, grafted principally on the Crab. Situation, sheltered from all cold winds by forest trees. Aspect, due south. Soil, a thick, light, and sharp loam, on the ragstone rock. The trees are much covered with lichens, both on pasture and cultivated land; trees of many kinds are badly cankered. We are subject to very heavy fogs and late spring frosts, also to the American blight.

5.—Mr. SIDNEY H. GOODWIN, *Smartswell, Mereworth.*

Exhibitor's Remarks.—Hoary Morning makes a good orchard standard, grows quickly and never cankers. This Apple will hang very late, when it gets a deep colour. Royal George is a very free-growing variety, with the wood wonderfully clear and free from canker. It will hang until November, and is a good cooking apple. Soil, loam, on ragstone.

6.—Mr. G. GOLDSMITH, *The Gardens, Hollenden, Tonbridge.*

Exhibitor's Remarks.—Situation exposed. Soil, a very heavy and wet loam; subsoil, a stiff clay. Reinette de Canada is a variety not grown so much as it deserves to be, being useful either for dessert or for kitchen use.

7.—Mr. C. HAYCOCK, *Gardener, Barham Court, Maidstone.*

Observations.—A very fine collection, the examples being all very large, and remarkably fine in appearance, giving evidence of very careful cultivation. Stated to have been grown on Cordons and other trained trees on the French Paradise and Doucin stocks.

8.—Mr. W. HERRINGTON, *The Gardens, Betteshanger Rectory, Sandwich.*

Observations.—Examples, large, clear skinned.

Exhibitor's Remarks.—Fruit from young Bush and Pyramid trees, grafted on the French Paradise (?) stock, which seems specially suited to this soil. Situation high, and exposed to all winds. Soil, a thin, poor loam, on hard chalk.

9.—Mr. L. A. KILLICK, *Langley, Maidstone.*

Exhibitor's Remarks.—Chiefly grafted on the Apple stock—a few on Paradise. Situation, exposed. Soil, partly loam, marl, and red pebbly pinnock. Many varieties of Apples worthy of cultivation canker in this district, so that we are limited in choice. The Paradise stock does not produce a tree large enough for market purposes. Standard trees, when about 10 to 12 years old, are considered sufficiently established to allow us to lay down the soil with grass to be fed off by sheep.

10.—Mr. CHARLES LANGLEY, *Crabble House, Dover.*

Observations.—A very fine lot of fruit.

Exhibitor's Remarks.—Grown on Pyramids planted about 25 years, some in 1881; stocks, unknown. Situation, sheltered by chalky hills. Soil, a chalky mixture, a vein of which runs up the Dover valley. The Apple trees used to suffer in hot summers, there being plenty of fruit, but small, so I dug large holes down to the chalk, and replanted the trees in good turfy loam. The trees now grow well and ripen their wood properly. The great secret is to mulch well with good manure; the better manure I use, the better the fruit. In very dry weather I water the trees with house sewage. My sole study since 1846 has been to cultivate the Apple and Pear here, and I have been very successful.

11.—Mr. T. MOORHOUSE, *Gardener to J. W. Temple, Esq., Leyswood, Groombridge, Tunbridge Wells.*

Exhibitor's Remarks.—Fruit from Bush trees 13 years old, grafted on the Crab. Situation in a kitchen garden, sheltered. Soil, heavy; subsoil, a yellow clay. The samples are of an average size. All the sorts make strong growth, while most of them fruit very freely, excepting Blenheim Orange, which is shy, and has small fruit.

12.—Mr. J. NEIGHBOUR, *Bickley Park, Bromley.*

Exhibitor's Remarks.—Fruit gathered from trees not pruned, but thinned out occasionally. Age, from 6 to 50 years;

mostly grafted on the Crab. Situation, exposed to south-west winds. Soil, rather sandy, with a mixture of clay. Some of the apples here are grafted on the Apple stock, having sown the seeds myself and grafted them. If I have any sorts that are not true to their names, or which the locality does not suit, I graft them with better kinds, provided the stocks are healthy. When planting, I always like to have the ground trenched, and some manure, or even old garden refuse, to be mixed with the soil, as the subsoil here is very poor. I think our fruit would be much larger if the trees were more sheltered.

13. ROBERT SMITH, *Gardener to The Lady Frances Fletcher, Kenward, Yalding, Maidstone.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Juneating, Irish Peach, Red Quarrenden, Kerry Pippin, Worcester Pearmain, Lady Sudeley, Margil, King of the Pippins, Cox's Orange Pippin, Claygate Pearmain, Scarlet Nonpareil, Gascoigne's Scarlet, Golden Knob, Keswick Codlin, Duchess of Oldenburg, Lord Suffield, Stone's or Loddington, Peasgood's Nonesuch, Blenheim Orange, Golden Noble, Beauty of Kent, Wellington, Winter Quoining, Northern Greening.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Quarrenden, Worcester Pearmain, Lady Sudeley, Duchess of Oldenburg, Stone's or Loddington Seedling, Cox's Orange Pippin, Peasgood's Nonesuch, Wellington, Lane's Prince Albert, Gascoigne's Scarlet, Queening, Northern Greening.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Quarrenden, Worcester Pearmain, Duchess of Oldenburg, Stone's, Cox's Orange Pippin, Kerry Pippin, Peasgood's Nonesuch, Wellington, Northern Greening, New Hawthornden, Cox's Orange Pippin, Worcester Pearmain.

Exhibitor's Remarks.—Situation, many orchards are fully exposed, few sheltered. Most gardens are sheltered. Soil, loam, part light, many heavy. Subsoil, rock, stone, and clay. Stocks: The younger trees no doubt are on the Paradise, but the older trees are on the Crab. The orchard trees are pruned to form open

heads. Many growers prefer the middle of the head taken out when young so as to form basin-shape, as it is called here, which seems to answer well. Driving through this district a few days ago, I was much struck with a lot of good trees of Wellington in full bearing about 10 to 20 years old. The branches had been shored up, so heavy was the crop of fine, clean fruit. Some of the growers said they should store a thousand bushels of Wellington. The largest fruit of the Wellington Apple I saw was on turf, fed by sheep fattened with oil-cake. Cox's Orange Pippin Apple is not so clean in many plantations as in former years. The best and cleanest fruits are from trees on heavy soil. Worcester Pearmain Apple on young trees is good and clean, but lacking colour. The birds are very troublesome with this variety, pecking holes in the fruit. Older orchard trees have suffered very much from maggots this season. To get good Apples from orchard trees manure requires to be used freely as top dressing, otherwise many trees become exhausted.

14.—Mr. A. WATERMAN, *Preston Hall Gardens, Aylesford.*

Observations.—Examples pale in colour and small.

Exhibitor's Remarks.—Grown on Standard trees about 34 years old, pruned every year, the branches being spurred in. Soil, a light loam, about 3 feet deep, resting on Kentish rag and gravel.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Red Astrachan, Red Quarrenden, Lord Suffield, Gravenstein, Ecklinville, Stirling Castle, King of the Pippins, Stone's, New Hawthornden, Small's Admirable, Mother, Cox's Orange Pippin, Blenheim Orange, Tower of Glamis, Warner's King, Lady Henniker, Lane's Prince Albert, Scarlet Nonpareil, Annie Elizabeth, Wellington, Yorkshire Greening, Sturmer Pippin, Court Pendu Plat.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Red Astrachan, Lord Suffield, Ecklinville Seedling, Stirling Castle, King of the Pippins, Stone's, New Hawthornden, Cox's Orange Pippin, Blenheim Orange, Tower of Glamis.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Red Astrachan, Lord Suffield, Ecklinville, Stirling Castle, Cox's Orange Pippin, Blenheim Orange, Stone's, Tower of Glamis, Small's Admirable, Wellington.

Exhibitor's Remarks.—Situation, sheltered north, east, and south by trees. Soil, loam, resting on the Kentish ragstone.

General Remarks.—Orchard trees are regularly pruned as well as all trained trees. The fruit is much finer and clearer on the Paradise stock, but the trees do not grow so large, but come into fruit much sooner. I prefer the Bush or Pyramid form.

15.—Mr. GEORGE WHITE, *Fairlawn, Maidstone.*

Observations.—Fruit good.

Exhibitor's Remarks.—Grown on very old Standard trees, grafted on the Crab. Situation where grown, sheltered by a hedge. Soil, stone shatter, overlying Kentish rag. The Orchards are cultivated, having a crop of currants and cobnuts beneath the Apples, though some are grown on turf. Those Orchards are the best where the grass is fed off by sheep.

Varieties of Apples suitable for Cultivation in Kent.

SELECTED (1883) BY

- Mr. G. BEATON, *Yokes Court, Mereworth.*
 „ G. BRITCHER, *Oak Lodge, Tonbridge.*
 Messrs. G. BUNYARD & Co., *Maidstone.*
 Mr. W. CHISHOLM, *Oxon Heath, Tonbridge.*
 „ W. DIVERS, *Wierton House, Maidstone.*
 Messrs. T. FROST & SONS, *Maidstone.*
 Mr. G. GOLDSMITH, *Hollanden, Tonbridge.*
 „ W. HERRINGTON, *Betteshanger Rectory, Sandwich.*
 „ L. A. KILLICK, *Langley, Maidstone.*
 „ C. LANGLEY, *Crabble House, Dover.*
 „ T. MOORHOUSE, *Groombridge.*
 „ J. NEIGHBOUR, *Bickley Park, Kent.*
 „ A. WATERMAN, *Preston Hall, Aylesford.*
 „ G. WHITE, *Fairlawn, Tonbridge.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	12	Hick's Fancy . . .)	1
King of the Pippins .	11	Hoary Morning . . .	
Ribston Pippin . . .	9	Hubbard's Pearmain .	
Scarlet Nonpareil . .	7	Juneating	
Court Pendu Plat . .	6	Lord Burghley . . .	
Mr. Gladstone . . .		Mabbott's Pearmain .	
Claygate Pearmain . .		Allen's Everlasting .	
Devonshire Quarrenden	5	Boston Russet . . .	
Kerry Pippin		Braddick's Nonpareil .	
Margil		Cobham	
Sturmer Pippin . . .		Coe's Golden Drop .	
Worcester Pearmain .		Cornish Gilliflower .	
Cockle's Pippin . . .	4	Duchess of York's	
Fearn's Pippin . . .		Favourite	
Yellow Ingestrie . .		Dutch Mignonne . .	
Blenheim Orange . .		Early Harvest . . .	
Golden Knob	3	Early or Summer Non-	
Irish Peach		pareil	
Mannington's Pearmain		Melon	
Wyken Pippin		Mother	
Duchess of Oldenburg .		Nonpareil	
Lemon Pippin	2	Northern Spy . . .	
Old Nonpareil		Oslin Pippin	
Reinette de Canada .		Powell's Russet . .	
Russet Nonpareil . . .		Pearmain	
Summer Golden Pippin		Rambour d'Amerique	
Syke House Russet . .	1	or Mère de Ménage	
Fenouillet Rouge . .		Red Astrachan . . .	
Gipsy King		Royal Russet . . .	
Gravenstein		Summer Nonpareil .	
Golden Pippin		Wheeler's Russet . .	
Golden Noble		Winter Quoining . .	
Herefordshire Pearmain			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling	13	Dr. Harvey	1
Lord Suffield	12	Duchess of Oldenburg	
Blenheim Orange	7	Dutch Codlin	
Keswick Codlin		Emperor Alexander	
Northern Greening		Frogmore Prolific	
Loddington Seedling	6	Gloria Mundi	
Warner's King		Hall Door	
Golden Noble	5	Hambleton Deux Ans	
Winter Quoining		Hawthornden	
Cellini	4	Hoary Morning	
Cox's Pomona		Hollandbury	
Ecklinville Seedling		Hubbard's Pearmain	
Manks' Codlin		Beauty of Wilts	
Gooseberry Apple	3	Bess Pool	
Hanwell Souring		Betty Geeson	
New Hawthornden		Cheshunt Pippin	
Peasgood's Nonesuch		Cobbett's Fall Pippin	
Stirling Castle		Lamb's Favourite	
Tower of Glamis		Lady Henniker	
Winter Hawthornden	2	Lewis's Incomparable	
Alfriston		Mère de Ménage	
Annie Elizabeth		Nelson's Glory	
Beauty of Kent		Old Hawthornden	
Dutch Mignonne		Pile's Russet	
Flower of Kent		Rambour d'Amerique	
Grenadier		Waltham Abbey Seed-	
Lord Derby		ling	
Round Winter Nonesuch		Wellington (or Dume-	
Small's Admirable		low's Seedling)	
Worcester Pearmain		Yorkshire Beauty	
Yorkshire Greening			

MIDDLESEX.

Exhibitors.

1.—Mr. R. BRAY, *Bedfont Villa, Bedfont.*

Observations.—Examples large, wonderfully clear skinned, and well coloured. Some examples of Manks' Codlin grown on

gravel, and others grown on clay, were very remarkable, the latter being twice the size, very highly coloured, and very handsome, thus proving the superiority of the clay soil.

Exhibitor's Remarks.—Grown on Standard trees planted 40 years ago, and grafted on the Crab. Situation, on high ground, with no shelter. Soil, rather sandy in places; subsoil, gravel. Sixty years ago a quantity of gravel was taken out of the land where my orchard now stands. The ground was levelled about 43 years since, and planted. The Queen's river runs within 20 feet of our northern hedge, and keeps our ground moist during the dry season.

2.—Mr. R. DEAN, *Bedfont and Ealing.*

Observations.—Examples large and fine.

Exhibitor's Remarks.—Examples grown chiefly on tall Bush and Pyramidal trees, from 14 to 20 years of age. Their growth is generally free and healthy, being worked on the free stock. Situation, in no respect sheltered. Soil, a very stiff loam; subsoil, clay. This is quite a market orchard district, where to grow kinds that will crop freely and early is the first consideration.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Early Julien, Manks' Codlin, Lord Suffield, Blenheim Pippin, and Wellington (culinary); Duchess's Favourite, Yellow Ingestrie, King of the Pippins, Cox's Orange Pippin, and Cockle's Pippin, all considerably grown in this district, but especially Kings and Wellingtons. Situation, sheltered by trees on the north.

3.—Mr. J. HUDSON, *Gardener to H. J. Atkinson, Esq.,*

Gunnersbury House, Acton.

Observations.—Examples of fair average merit.

Exhibitor's Remarks.—Mostly grown on Orchard Standards some on cultivated ground, others on grass. Ages, from 20 to 40 years. Situation, exposed. Soil, a light loam on gravel. Our trees suffered much from the wet season of 1879, and since then they have been more disposed to canker.

4.—Messrs. C. LEE & SON, *Nurserymen, &c., Hammersmith and Ealing.*

Observations.—A very fine and most interesting collection of the best varieties.

Exhibitor's Remarks.—Grown at our Ealing Nursery, mostly on Pyramid and Bush trees, grafted on the English Paradise and Crab stock. Situation, exposed. Soil, a heavy loam. Apples do well in this district, grown as Standards on the Free seedling Apple stocks, the best results are from those worked on the English Paradise as Bush, Pyramid, and Espalier formed trees.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Irish Peach, Red Astrachan, Lord Suffield, Stirling Castle, Pott's Seedling, Ecklinville Seedling, Cellini, King of the Pippins, Cox's Orange Pippin, Warner's King, Golden Noble, New Hawthornden, Claygate Pearmain, Adams' Pearmain, Golden Reinette, Cockle's Pippin, Ribston, Blenheim Orange, Northern Greening, Margil, Alfriston, Wellington, Sturmer.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Lord Suffield, Stirling Castle, Pott's Seedling, King of the Pippins, New Hawthornden, Cox's Orange Pippin, Cellini, Warner's King, Blenheim, Dutch Mignonne, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Lord Suffield, Pott's Seedling, Ecklinville, Stirling Castle, Worcester Pearmain, King of the Pippins, New Hawthornden, Warner's King, Blenheim, Wellington.

5.—Mr. J. ROBERTS, *Gardener to the Messrs. Rothschild, Gunnersbury Park, Acton.*

Observations.—Examples of fair average quality.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Early Harvest, Keswick Codlin, Lady Sudeley, Duchess of Oldenburg, Worcester Pearmain, Stirling Castle, Mabbot's Pearmain, Golden Noble, Cox's Orange Pippin, Emperor

Alexander, Adam's Pearmain, Pott's Seedling, Claygate Pearmain, The Sandringham, Court Pendu Plat, Blenheim Orange, Sturmer Pippin, Lane's Prince Albert, Annie Elizabeth, Bramley's Seedling, Bismarck, Wellington, Northern Greening, Rosemary Russet.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Early Harvest, Keswick Codlin, Lady Sudeley, Duchess of Oldenburg, Worcester Pearmain, Golden Noble, Cox's Orange Pippin, Stirling Castle, Blenheim Orange, Court Pendu Plat, Lane's Prince Albert, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET
CULTURE.

Keswick Codlin, Duchess of Oldenburg, Worcester Pearmain, Cockle's Pippin, Stirling Castle, Emperor Alexander, Blenheim Orange, Lane's Prince Albert, Bramley's Seedling, Wellington, Five-Crowned Pippin.

Exhibitor's Remarks.—Situation, sheltered. Soil, the top spit a friable loam; subsoil, a light clay, resting on gravel. My own experience leads me to the conclusion that the Paradise stock is the best for the early Kitchen Apples, but the Crab for late keepers; while for dessert kinds, I decidedly prefer Standard trees on the Crab stock, as the fruit is more fully exposed to the sun, and always eats crisper than from Pyramids on the Paradise stock. Our best Kitchen Apples are from Pyramid trees 12 to 14 feet high, on the free stock. Before planting the ground was deeply trenched and liberal supplies of manure added. In addition to this about three barrow-loads of maiden loam and burnt ashes was placed around the roots of each tree at planting time.

These trees are mulched once during the early summer, and receive an occasional watering from the hose in dry weather. Very little in the way of root-pruning has been needed, as, the position being sheltered, we seldom fail in securing good crops of fruit. Pruning has consisted in regulating the main branches thinly, so that the sun and air have free access to the centre of the trees.

6.—ROYAL HORTICULTURAL SOCIETY, *Chiswick*.

Observations.—The examples in this collection, although not so large and highly coloured as some others, were specially

valuable on account of the correct nomenclature, thus serving as tests for comparison with others in the determination of the names. The labels attached indicated whether the fruit was for dessert or culinary purposes, and when in season; also the kind of stock on which grown.

Superintendent's Remarks.—The examples shown were all grown on Bush and Pyramid trees, the greater number being about 18 years old, and grafted on the Free stock; while the others were from trees 6 to 8 years old, grafted on the French Paradise and Doucin stocks. Situation, sheltered, but very subject to spring frosts. Soil, a heavy loam, bordering on clay; subsoil, gravel. The trees are not subjected to much pruning, the long straggling shoots being simply shortened, and the others thinned out so as to allow all parts of the tree to be fully exposed to the direct influence of the sun's rays and the action of the weather. This is a point of special importance, and is one which seems to be very much overlooked by those who have to grow their trees within restricted areas, and subject them to much pruning and summer pinching.

The finest fruits were gathered from small trees about 3 feet high and 6 years old, planted 3 feet apart, and grafted on the French Paradise and Doucin stocks, each tree bearing, on an average, about 25 fruit of good size. Of the stocks, those grafted on the Doucin make much the larger trees, and seem to be more vigorous, but both bear equally good crops. Experience here points to the use of these stocks, in small gardens especially, as being of the very utmost value and importance.

7.—Mr. W. TIDY, *Gardener, Stanmore Hall, Middlesex.*

Observations.—Fair average examples.

Exhibitor's Remarks.—Grown on Standard trees 50 years old. Situation, partially sheltered. Soil, a dark vegetable mould resting on clay. Blenheim Orange and Wyken Pippin are much used for comfits and mincemeats.

8.—Messrs. J. VEITCH & SONS, *Royal Exotic Nursery, Chelsea.*

Observations.—A remarkably well-grown, varied, and interesting collection, and correctly labelled.

Exhibitors' Remarks.—The Apples exhibited by us were all grown at our Nursery at Southfields, Fulham. The Nursery is situate within a quarter of a mile of the River Thames, and is surrounded by a neighbourhood which is rapidly being built

upon, and is, in fact, entirely within the influence of the London smoke and fogs. Within a short distance from the Nursery is one of the largest gasworks in the metropolis; also several large breweries and factories of various descriptions. The soil of the Nursery is about 18 inches in depth, and is very light, consisting entirely of sand and humus (vegetable mould) on a layer of yellow adhesive sand, beneath which is a rather thick stratum of yellow sandy gravel. The whole series is very quickly permeated by water. The fruit was grown upon dwarf Pyramid trees grafted on the Paradise stock, none of which exceed 5 years of age, but the greater part of it was gathered from trees 2 and 3 years old.

TWELVE VARIETIES BEST ADAPTED TO EXHIBITORS' DISTRICT.

Lord Suffield, Warner's King, Winter Hawthornden, Alfriston, Dumelow's Seedling, Baumann's Red Reinette. *Dessert*.—Devonshire Quarrenden, Kerry Pippin, King of Pippins, Cox's Orange Pippin, Lord Burghley, Cockle's Pippin.

9.—Mr. G. THOMPSON, *The Gardens, Croxby House, Hounslow.*

Observations.—Large and fine examples.

Exhibitor's Remarks.—Grown on Standards, Pyramids, and Cordons, the finest fruit being from the Pyramids. The trees are from 3 to 10 years old, being grafted on the Paradise stock. Situation, in orchard, open. Soil is very light; subsoil, gravel. In the market gardens in this district the Keswick and Mank's Codlins are the varieties chiefly depended on. Keswick Codlin is not so liable to canker, and is a sure bearer. Many sorts canker very badly, especially Wellington (Dumelow's Seedling). They were so bad the last few years that many of the growers have done away with them altogether. A great many King of the Pippins are grown, as they are sure bearers, but canker very much. Lord Suffield is the best early Kitchen Apple we have for either private or market use, but the branches die a good deal. A sort called Duchess's Favourite is grown about Cranford, which bears very heavy crops every other year. The trees seem to keep healthy, and it is a good market Apple.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Early Julien, Duchess's Favourite, King of the Pippins, Cox's Orange Pippin, Blenheim Orange, Lord Suffield, Keswick Codlin, Stirling Castle, Manks' Codlin, Warner's King, Harvey's Wiltshire Defiance, Dumelow's Seedling.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Early Julien, Duchess's Favourite, King of the Pippins, Cox's Orange Pippin, Blenheim Orange, Lord Suffield, Keswick Codlin, Stirling Castle, Manks' Codlin, Dumelow's Seedling. King of the Pippins is the chief kind grown in the market gardens. Situation, partly sheltered. Soil, very light, gravelly.

General Remarks.—In the market gardens the trees are all planted as Standards, with Gooseberries, Raspberries, and Currants in between. In the well-kept gardens the trees are kept well thinned out every winter, and useless sorts are grafted every spring.

10.—Mr. R. WOOD, *Gardener to Mrs. Saunders, Duke's Avenue, Chiswick.*

Exhibitor's Remarks.—Nearly all were gathered from old Standard orchard trees, worked on the Crab. Situation, very sheltered by large houses and tall trees. We have had very large crops this season and for several years, owing to the shelter, but the fruit has been small. The trees have been very much neglected for many years.

11.—Mr. J. WOODBRIDGE, *Gardener, Syon House, Brentford.*

Exhibitor's Remarks.—Grown on Bush and Standard trees of various ages, grafted on the Crab and Paradise stocks. Situation, sheltered, in walled garden. Soil, light and sandy, on gravel. I find that trees grown in a Bush form, on the Paradise or Dwarfing stock, are very suitable for the borders of kitchen gardens. They bear better fruit, require less pruning, and can be allowed to grow in a more natural way. Trees on the Crab or Free stock I consider more suitable for orchards.

12.—Mr. A. WRIGHT, *Gardener to Mr. E. H. Watts, Chiswick.*

Observations.—Examples of fair average size.

Exhibitor's Remarks.—Grown on very healthy and clean Standard and Bush trees, grafted on the Crab. Age, from 10 to 12 years. Situation where grown, sheltered. Soil, a medium black loam, on gravel.

List of Varieties of Apples suitable for Cultivation in Middlesex.

SELECTED (1883) BY

Mr. R. BRAY, *Bedfont*.
 „ R. DEAN, *Bedfont*.
 „ J. HUDSON, *Gunnersbury House, Acton*.
 MESSRS. C. LEE & SON, *Hammersmith*.
 Mr. J. ROBERTS, *Gunnersbury Park, Acton*.
 ROYAL HORTICULTURAL SOCIETY, *Chiswick*.
 Mr. G. THOMPSON, *Croxby House, Hounslow*.
 „ W. TIDY, *Stanmore Hill, N*.
 „ R. WOOD, *Duke's Avenue, Chiswick*.
 „ J. WOODBRIDGE, *Syon House, Brentford*.
 „ A. WRIGHT, *Devonhurst, Chiswick*.
 „ A. WYATT, *Hatton, Hounslow*.

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . . }	7	Lemon Pippin . . . }	2
King of the Pippins . . . }		Sturmer Pippin . . . }	
Ribston Pippin . . . }		Winter Pearmain . . . }	
Blenheim Orange . . . }	6	Beachamwell . . . }	1
Yellow Ingestrie . . . }		Boston Russet . . . }	
Kerry Pippin . . . }	5	Coe's Golden Drop . . . }	
Scarlet Nonpareil . . . }		Golden Nonpareil . . . }	
Cockle's Pippin . . . }	4	Keddleston Pippin . . . }	
Fearn's Pippin . . . }		Lewis's Incomparable . . . }	
Irish Peach . . . }		Mr. Gladstone . . . }	
Worcester Pearmain . . . }		Norfolk Bearer . . . }	
Court Pendu Plat . . . }	3	Old Nonpareil . . . }	
Court of Wick . . . }		Omar Pacha . . . }	
Duchess's Favourite . . . }		Powell's Favourite . . . }	
Duchess of Oldenburg . . . }		Red Juneating . . . }	
Devonshire Quarrenden . . . }		Reinette de Caux . . . }	
Gravenstein . . . }	2	Rosemary Russet . . . }	
Red Astrachan . . . }		Royal Russet . . . }	
Adams' Pearmain . . . }		Stone Pippin . . . }	
Braddick's Nonpareil . . . }		Winter Russet . . . }	
Dutch Mignonne . . . }		Wyken Pippin . . . }	
Lamb Abbey Pearmain . . . }			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling . . . }	11	London Pippin . . . }	2
Lord Suffield }		Norfolk Beefing . . . }	
Manks' Codlin }	8	Yorkshire Greening . . }	1
Stirling Castle }		Beauty of Hants . . . }	
Blenheim Orange . . . }	7	Bess Pool }	1
Golden Noble }		French Crab }	
Keswick Codlin }	6	Gravenstein }	1
Warner's King }		Hambledon Deux Ans . . }	
Beauty of Kent }	5	Hollandbury }	1
Cellini }		Lane's Prince Albert . . }	
Ecklinville Seedling . . }	4	Landsberger Reinette . . }	1
Mère de Ménage . . . }		Lord Derby }	
New or Winter Haw-	3	Nonesuch }	1
thornden }		Northern Greening . . }	
Alfriston }	3	Old Russet }	1
Emperor Alexander . . }		Peasgood's Nonesuch . . }	
Gloria Mundi }	2	Pott's Seedling }	1
Waltham Abbey Seed-		Russian Transparent . . }	
ling }	2	Stock Leadington . . . }	1
Annie Elizabeth . . . }		Striped Beefing }	
Early Julien }	2	Stone's or Loddington . . }	1
Frogmore Prolific . . . }		Seedling }	
Old Hawthornden . . . }		Winter Pearmain . . . }	

SURREY.

*Exhibitors.*1.—Mr. J. BURNETT, *Deepdene Gardens, Dorking.*

Observations.—An interesting collection.

Exhibitor's Remarks.—Gathered mostly from large orchard trees, some being from Espaliers and Bushes. Many of the trees are old. A few of the young trees are grafted on Paradise, but the greater number on Crab. Situation, sheltered. Soil, a light loamy sand; subsoil, a stiff clay. I find the varieties selected to be sure average bearers every year; and possibly the most certain are Keswick Codlin, Lord Suffield, Cellini, Stirling Castle, Ecklinville Seedling, and Cox's Orange Pippin. Ribston Pippins are grown largely in this district in farm orchards, and are much more appreciated than softer fruit, though they only bear once in two or three years.

2.—Mr. G. W. CUMMINS, *Gardener to A. H. Smee, Esq., The Grange, Wallington, Surrey.*

Exhibitor's Remarks.—The fruits were grown on Standards and on Bushes, or hollow bowl-shaped trees, which are preferred here, where many are grown upon a small extent of ground. They are from 6 to 25 years of age. Standards are worked on Crab, small Bushes on Paradise. Situation, damp, sheltered by large forest trees. Soil, a peaty bog, but improved by long cultivation; subsoil, wet inferior gravel. Ribston Pippins generally bear well, but the trees are more subject to canker than any other sort. When the roots reach the wet gravel, they seldom fruit satisfactorily.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Kitchen.—Cellini, Lord Suffield, Stirling Castle, New Hawthornden, Lord Derby, Golden Noble, Blenheim Orange, Warner's King, Beauty of Kent, Wellington, Lane's Prince Albert, Winter Peach. *Dessert.*—Early Harvest, Irish Peach, Kerry Pippin, Worcester Pearmain, Ribston Pippin, Cox's Orange Pippin, Brownlee's Russet, Scarlet Nonpareil, Duke of Devonshire, Cornish Aromatic, Court Pendu Plat, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Kitchen.—Cellini, Lord Suffield, Stirling Castle, New Hawthornden, Blenheim Orange, Wellington. *Dessert.*—Irish Peach, Kerry Pippin, Ribston Pippin, Cox's Orange Pippin, Duke of Devonshire, Court Pendu Plat.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Lord Suffield, Stirling Castle, New Hawthornden, Blenheim Orange, Wellington, Cox's Pomona, Devonshire Quarrenden, Gravenstein, Ribston Pippin, Cox's Orange Pippin.

Exhibitor's Remarks.—Very few apples are grown in this district specially for market.

In planting young trees we take out all the old soil from the space needed, break up the gravel, putting in a quantity of coarser brick rubbish, which is covered with a thick layer of turf. We add two barrowsful of strong yellow loam, one of burnt garden refuse, and the same quantity of lime rubbish, the whole being turned and mixed together. The hole is filled level with the surface of the ground, and then the tree is placed in position, and some richer soil is worked in among the roots, finished off with a heavy mulching of stable manure.

Older trees which do not fruit properly are lifted, root pruned, and replanted in the same manner, generally with the best results. Bush and Standard trees only are grown, the former are worked on Paradise and the latter on Crab stock.

3.—Mr. J. DEAN, *Gardener to Granville W. Leveson Gower, Titsey Place, Godstone.*

Observations.—Examples small, but well coloured.

Exhibitor's Remarks.—The old orchard trees show great exhaustion, having made scarcely any young growth for years. The others in kitchen garden are all Bushes, trained open or cup-shaped. They are mostly on the Crab, a few being on Paradise, but on this stock the Ribston Pippin cankers very much. Situation, well sheltered and facing south, 400 feet above sea-level. Soil prepared, consisting of road scrapings with loam, being mulched annually with stable manure. A great many varieties of Apples canker very badly here, whether the season be wet or dry; and every spring we have to cut out cankered wood. It seems hopeless to try to obtain a good-shaped tree in the prepared soil; but on the real chalk, which is very dry, we have two specimen trees, a Ribston Pippin and a Blenheim Orange planted 50 years, growing vigorously, without a spot of canker, but they give no fruit. Why is this?

4.—Mr. B. GREAVES, *The Gardens, Broome Hall, Surrey.*

Observations.—Examples small.

Exhibitor's Remarks.—Grown on Orchard Standards, many of stunted growth. The trees are old. Situation, sheltered. Soil, a heavy loam; subsoil, a stiff clay. The trees are much covered by lichen caused by the undrained soil. The Apples here are only of moderate quality, caused, no doubt, by want of better draining and cultivation. The blossoms often suffer from spring frosts, and the leaves from myriads of caterpillars. All Apples grown here are Orchard Standards, and receive very little attention. A new orchard is being prepared, which will be drained and trenched.

5.—Mr. T. B. HAYWOOD, *Woodhatch Lodge, Reigate.* Gardener,
Mr. J. RIDOUT.

Observations.—Fruit of fair average quality.

Exhibitor's Remarks.—Grown on Standard and Pyramid trees, the Standards being old trees, and the Pyramids about 12 years of age; about equal portions on the Crab and Paradise. Situation, fairly sheltered. Soil, sandy; subsoil, sand with ironstone gravel. The Ribston Pippin, Cellini, Old Hawthornden, and a few others on the Paradise are in this neighbourhood much subject to canker every year.

6.—Mr. H. MATTHEWS, *Betchworth Park*.

Observations.—Examples very good, especially those of Cox's Pomona and Yorkshire Beauty—the latter named Palmer's Glory.

Exhibitor's Remarks.—Fruit grown on Standards chiefly, being good, large, healthy trees, in open orchards. Soil, in some parts light and sandy, in others heavy with a clay subsoil. Ribston Pippin cankers very much, also Dumelow's Seedling, the young wood dying every year as soon as the roots reach the gravel. Ground, rather wet in this district. Being in the valley of the Mole, we are subject to spring frosts.

7.—Mr. J. M'INTOSH, *Duneevan, Weybridge, Surrey*. Gardener,
Mr. T. TAYLOR.

Observations.—Examples very fine, remarkably clear skinned.

Exhibitor's Remarks.—Trees grown mostly as Pyramids, varying in age from 6 to 20 or more years, grafted on the Crab and Paradise. Situation, sheltered. Soil, light; subsoil, wet sand. King of the Pippins, Court of Wick, and Pearson's Plate bear best in this soil as Standards, also Dumelow's Seedling; and as Pyramids, Alfriston, Landsberger Reinette, and Ecklinville. The Pyramids every second year are cut round 2 feet 6 inches from the stem, roots raised, fresh soil being added, which is trodden firm and mulched on the surface, thereby producing fine fruit.

8.—Messrs. J. PEED & SONS, *Roupell Park Nursery, Tulse Hill*.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mr. Gladstone, Irish Peach, Duchess of Oldenburg, Kerry Pippin, Worcester Pearmain, King of the Pippins, Cox's Orange Pippin, Cellini, Blenheim Orange, The Queen, Schoolmaster, Scarlet Nonpareil, Sturmer Pippin, Keswick Codlin, Lord Suffield, Ecklinville Seedling, Peasgood's Nonesuch, Small's Admirable, New Hawthornden, Pott's Seedling, Domino, Tower of Glamis, Warner's King, Bramley Seedling, Lane's Prince Albert, Wellington.

Situation, very exposed. Character of soil, 2 feet sandy loam resting on about 2 to 3 feet of strong loam, under that 10 feet of gravel.

General Remarks.—We use generally for Espaliers, Cordons, Bushes, or Pyramids, the English Paradise stock; and for Standard

trees, a Free stock, but not the Crab. We believe frequently lifting the trees to be productive of fruitfulness, also in feeding them well while swelling their fruit, and in keeping a sharp look-out after American blight and other apple pests. All the varieties named fruit here very freely, specially so when grafted on the English Paradise stock, either as Cordons, Bushes, or Espaliers. This is a cold exposed situation. Soil, sandy loam, 2 feet; subsoil, 2 feet strong loam; under that, gravel.

9. Mr. W. ROUPELL, *Harvey Lodge, Roupell Park, S.W.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Juneating, Irish Peach, Devonshire Quarrenden, Keswick Codlin, Duchess of Oldenburg, Lord Suffield, Pott's Seedling, Cellini Pippin, Kerry Pippin, Worcester Pearmain, Lady Sudeley, Ecklinville Seedling, Grenadier, Stirling Castle, Lodington or Stone's Apple, Ribston Pippin, Cox's Orange Pippin, Blenheim Orange, King of Pippins, Peasgood's Nonesuch, The Queen, Golden Noble, Lane's Prince Albert, Wellington.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Juneating, Irish Peach, Quarrenden, Lord Suffield, Cellini Pippin, Peasgood's Nonesuch, The Queen, Ribston Pippin, Cox's Orange Pippin, Blenheim Orange, Lane's Prince Albert, and Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Irish Peach, Quarrenden, Duchess of Oldenburg, Lord Suffield, Pott's Seedling, Cellini Pippin, Cox's Orange Pippin, Blenheim Orange, Lane's Prince Albert, and Wellington.

N.B.—The new and approved varieties are not much known in the district, and both gardeners and their employers need guidance.

Exhibitor's Remarks.—Situation, top of Brixton Hill, rather exposed, but not so liable to spring frosts as lower ground. Character of soil, ordinary kitchen garden improved by the addition of soot, lime, &c. Subsoil, gravel, sand, and clay, with good drainage.

General Remarks.—The fruit exhibited is from Bushes and Pyramids on the Paradise, slightly pruned in summer, and again in January or February. The Standard trees in the neighbourhood are much neglected. They are old, infested with insect pests, and no one can say with certainty what the stocks are. They are generally considered to be on the Crab stock.

Varieties of Apples suitable for Cultivation in Surrey.

SELECTED (1883) BY

- MR. J. BARCLAY, *The Durdans, Epsom.*
 „ J. BURNETT, *The Deepdene, Dorking.*
 „ J. COOMBES, *Sheen House, Mortlake.*
 „ G. W. CUMMINS, *The Grange, Wallington.*
 „ J. DEAN, *Titsey Place, Surrey.*
 „ B. GREAVES, *Broome Hall, Holmwood.*
 „ J. RIDOUT, *Woodhatch Lodge, Reigate.*
 „ H. MATTHEWS, *Betchworth.*
 „ T. TAYLOR, *Duneevan, Weybridge.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins .	9	Cornish Gilliflower .	1
Cox's Orange Pippin .	7	Downton Pippin . .	
Blenheim Orange . .	5	Edmund Jupp . . .	
Kerry Pippin		Franklin's Golden	
Ribston Pippin		Pippin	
Herefordshire Pearmain	4	Golden Knob	
Court Pendu Plat . . .	3	Juneating	
Court of Wick		Landsberger Reinette	
Claygate Pearmain . .		Leyden Pippin . . .	
Cockle's Pippin	2	Lord Burghley . . .	
Devonshire Quarrenden		Margil	
Fearn's Pippin		Mother Apple	
Golden Reinette		Northern Greening .	
Gravenstein		Northern Spy	
Irish Peach		Ord's Apple	
Mannington's Pearmain		Pitmaston Pine Apple	
Melon Apple		Red Juneating	
Pearson's Plate		Reinette de Canada .	
Adams' Pearmain . . .		Scarlet Nonpareil . .	
Beauty of Kent		Scarlet Pearmain . .	
Benoni		Scarlet Russet	
Braddick's Nonpareil .		Sturmer Pippin . . .	
Boston Russet		Seigende Reinette . .	
Cellini		Summer Strawberry .	
Cornish Aromatic . . .		Wyken Pippin	
		Yellow Ingestrie . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling . . . }	8	Cheshire Codlin . . . }	1
Lord Suffield . . . }		Cox's Pomona . . . }	
Warner's King . . . }	6	Curltail Pippin . . . }	
Blenheim Orange . . . }	5	Edmund Jupp . . . }	
Cellini }		French Crab }	
Ecklinville Seedling . . . }	4	Frogmore Prolific . . . }	
Keswick Codlin }		Gloria Mundi }	
Bedfordshire Foundling . . }	3	Hoary Morning }	
New Hawthornden . . . }		Hollandbury }	
Pott's Seedling }	2	Loddington Seedling . . . }	
Alfriston }		Lord Gwydyr }	
Beauty of Kent }		Mère de Ménage }	
Emperor Alexander . . . }		Minchall Crab }	
Golden Noble }		Nelson's Glory }	
Hawthornden }		Northern Greening . . . }	
Lemon Pippin }		Nonesuch }	
Lord Derby }		Palmer's Glory, or	
Norfolk Beefing }	1	Yorkshire Beauty . . . }	
Reinette de Canada . . . }		Round Winter Nonesuch . . }	
Stirling Castle }		Rymer }	
Waltham Abbey Seedling . . . }		Tower of Glamis }	
Annie Elizabeth }		Wormsley Pippin }	
Bess Pool }		Winter Peach }	
Brabant Bellefleur . . . }		Winter Quoining . . . }	

SUSSEX.

Exhibitors.

1.—Mr. G. BREESE, *The Gardens, Petworth Park, Sussex.*

Observations.—Examples remarkably highly coloured and of excellent quality.

Exhibitor's Remarks.—Grown mostly as Standards. Some trees are young, which produce the finest fruit; the older trees give the best-coloured fruit. Age of trees from 5 to 50 years. They are grafted on the Crab. Situation, in orchard, well sheltered from north and north-east. Soil, a heavy loam on clay. There are many kinds grown in this neighbourhood that fruit remarkably well. I grow a quantity on the Paradise stock, and so do my neighbours. I advise people to plant the Paradise stock freely, as a great number of sorts do wonderfully well on it.

2.—Messrs. CHEAL & SONS, *Lowfield Nurseries, Crawley.*

Observations.—A varied and extensive contribution, representative of most of the varieties of Apples grown in Sussex.

Exhibitor's Remarks.—The best and handsomest fruits are from Cordons on the French and English Paradise. Situations, varied, generally fairly exposed. Soil, a stiff loam; subsoil, the Weald of Sussex clay, varying from bright yellow to blue marly clay, all more or less impregnated with iron. The Weald of Sussex lying principally flat, and the soil being of a retentive nature, it becomes saturated with water during the winter and spring months. Apples generally succeed well with care, but in most cases the orchards are left to nature, and no means are taken to increase their fertility or improve the quality of the fruit. Some kinds will not succeed, and canker the first year, such as Lady Henniker. Cox's Orange Pippin—a most accommodating Apple—would not grow or fruit in one orchard so as to be worth cultivating. Claygate Pearmain is found in most of the orchards in Sussex, and bears well.

General Remarks.—A considerable number of our Apples are grown on Cordon and Bush trees, worked upon the English Paradise stock. The Cordons we prune in July, and again in September, occasionally cutting out unfruitful spurs in spring. We occasionally root-prune strong growers or unproductive trees, and the result of this we find very beneficial. There are, however, a few varieties that have to be treated on the extension system, such as Irish Peach, Kerry Pippin, Red Juneating, &c.; also the Blenheim Orange does best as a Standard. The Orchard Standards upon the Free stock require to have weak and unfruitful branches thinned out to admit sun and air, and we firmly believe in the extension system for this class of tree.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Astrachan, The Professor, Worcester Pearmain, Keswick Codlin, Duchess of Oldenburg, Lord Grosvenor, Ecklinville, Pott's Seedling, Frogmore Prolific, Stirling Castle, Warner's King, New Hawthornden, King of Pippins, Lord Derby, Golden Noble, Blenheim Orange, Lane's Prince Albert, Cox's Orange, Mannington's Pearmain, Duke of Devonshire, Winter Quoining, Wellington, Norfolk Beefing, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Professor, Worcester Pearmain, Duchess of Oldenburg, Ecklinville, Pott's Seedling, Stirling Castle, Warner's King, King of Pippins, Blenheim Orange, Lane's Prince Albert, Cox's Orange, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Worcester Pearmain, Duchess of Oldenburg, Ecklinville, Stirling Castle, King of Pippins, Blenheim Orange, Cox's Orange, Lane's Prince Albert, Wellington, Norfolk Beefing. Warner's King, King of the Pippins, Blenheim Orange, Wellington, and Norfolk Beefing are grown to a considerable extent in the district.

3.—MR. SIDNEY FORD, *Gardener, Leonardslee, Herisham.*

Observations.—A very interesting collection, containing many local varieties of merit.

Exhibitor's Remarks.—The collection sent consists of about one half the varieties grown here in these gardens and orchards as Bush and Standard trees. Situation, 273 feet above sea-level, on a gentle slope, facing south. Soil varies much, from a sandy loam to stiff clay; the subsoil consisting of sandy gravel and sand rock. There are a great number of local kinds very little known elsewhere, viz., Edmund Jupp, First and Last, Treadcroft Seedling, Langley's Seedling, St. Leonard's Seedling, and 50 others I could name, all good, useful kinds.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Blenheim Orange, Warner's King, Tower of Glamis, Beauty of Kent, Lady Henniker, Bedfordshire Foundling, Yorkshire Greening, Cellini Pippin, Golden Noble, Dr. Hogg, Winter Quoining, Ribston Pippin.

4.—MR. R. MILLER, *Southdown Road, Shoreham, Sussex.*

Observations.—Examples of fair average merit.

Exhibitor's Remarks.—Grown on Standard and Bush trees from 20 to 50 years old, grafted on the Crab. Situation sheltered. Soil, heavy; subsoil, clay. Early Harvest bears a good crop in alternate years; Keswick, Lord Suffield, Hawthornden, Wellington, Cockle's Pippin, and Cellini fruit more or less every year, and are generally good; Northern Greening bears well, but the trees being very old, and subject to high winds, the fruit is generally small. Apples are not much grown in this neighbourhood, being too much exposed to the sea and to high winds in the autumn.

5.—Mr. J. RUST, *The Gardens, Eridge Castle, Tunbridge Wells.*

Observations.—Fruit small, highly coloured.

Exhibitor's Remarks.—About one half are grafted on the Free stock, many being very old trees; the others are on the Paradise. Situation of orchard 400 feet above the sea-level, very much exposed to high winds. Soil, a stiff loam, resting on marl. For orchard planting on grass, my experience is in favour of the Free stock; whilst for cultivated land, the Paradise has much the advantage, especially in exposed places, and the trees are best in the Bush form.

I do not approve of hard pruning; prefer thinning out the branches. The Paradise stock is best for dessert kinds, and the Crab stock for culinary kinds.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Worcester Pearmain, Kerry Pippin, Fearn's Pippin, Duchess of Oldenburg, Lord Suffield, Lady Henniker, Stirling Castle, Lady Sudeley, Golden Noble, Peasgood's Nonesuch, Tower of Glamis, Betty Geeson, New Hawthornden, Cox's Orange Pippin, Ribston Pippin, Adams' Pearmain, Bedfordshire Foundling, Lemon Pippin, Hall Door, White Paradise, Mère de Ménage, Winter Queening, Northern Greening.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Astrachan, Fearn's Pippin, Lord Suffield, Cox's Orange, Stirling Castle, Warner's King, Blenheim Pippin, Wellington, Lane's Prince Albert, Bramley's Seedling, Sturmer Pippin, Golden Knob.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Emperor Alexander, Duchess of Oldenburg, Nanny, Peasgood's Nonesuch, Sandringham, The Queen, Worcester Pearmain, Lady Sudeley, Golden Noble, White Paradise.

Varieties of Apples suitable for Cultivation in Sussex.

SELECTED (1883) BY

Mr. G. BREESE, *Petworth Park, Petworth.*

MESSRS. CHEAL & SONS, *Crawley.*

Mr. S. FORD, *Leonardslee, Horsham.*

„ R. MILLER, *Southdown Nursery, Shoreham.*

„ J. RUST, *Eridge Castle, Tunbridge Wells.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . .	5	Dutch Mignonne . . .	1
Cockle's Pippin . . .	4	Early Harvest . . .	
Irish Peach	3	Egremont Russet . . .	
Devonshire Quarrenden		Emperor Napoleon . . .	
Sturmer Pippin		Fearn's Pippin	
Claygate Pearmain . . .	2	Golden Harvey	
Court Pendu Plat . . .		Golden Knob	
King of the Pippins . . .		Kerry Pippin	
Mannington's Pearmain		Mr. Gladstone	
Ribston Pippin		Rosemary Russet	
Winter Queening	1	Scarlet Nonpareil . . .	
Adams' Pearmain		Sops in Wine	
Astrachan Red		Wyken Pippin	
Blenheim Orange		Yellow Ingestrie	
Cornish Gilliflower . . .			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Warner's King	5	Dutch Codlin	1
Alfriston	3	Forge	
Blenheim Orange		Grenadier	
Cellini		Hanwell Souring	
Cox's Pomona	2	Hawthornden of Sussex	
Keswick Codlin		Lady Henniker	
Ecklinville Seedling . . .		Loddington Seedling . . .	
Emperor Alexander . . .		Lord Derby	
Hawthornden, New		Norfolk Bearer	
Hawthornden, Old	1	Norfolk Beefing	
Lord Suffield		Pomeroy of Sussex	
Mère de Ménage		Royal Russet	
Northern Greening	1	Winter Coleman	
Annie Elizabeth		Winter Nonesuch	
Beauty of Kent		Yorkshire Beauty	
Bedfordshire Foundling		Yorkshire Greening	
Dumelow's Seedling . . .			

WILTSHIRE.

*Exhibitors.*1.—Mr. G. ALLEN, *Ramsbury Manor, Hungerford.*

Observations.—Examples large and fine.

Exhibitor's Remarks.—Grown mostly on very old Standard and Espalier trees. Those grafted on the Crab appear to grow best in this soil. Situation, in a valley close to the River Kennet, sheltered from S.E. winds. Soil, a strong loam, resting on chalky flint, and gravelly subsoil. Most of the Apples were planted here 30 years ago, and they all appear to do well. The Lemon Pippin crops very well on very old Standard trees and Espaliers. Ribston Pippin, Margil, and that class of apples are not grown; they do not fruit, and what little growth they make dies in the winter, no doubt from their roots getting into the wet subsoil, this being nearly level with the water. People in this part of the country are now taking to plant Bush and Pyramid trees instead of Standards.

2.—Mr. J. HORSEFIELD, *Heytesbury, Wilts.*

Observations.—Examples small.

Exhibitor's Remarks.—Gathered from old Standard and Pyramid trees, grafted on the Crab, at Heytesbury in the Wylde Valley. Situation, sheltered, low and damp. Soil, chalk marl on chalk.

3.—Mr. J. REDINGTON, *The Gardens, Littlecote, Hungerford, Wilts.*

Observations.—Fruit small.

Exhibitor's Remarks.—Grown on old Standard trees that have been planted 65 years, grafted on the Crab. A few of the newer sorts are from Espaliers on the Paradise. Situation, north aspect, sheltered on south and west by high hills and large trees. Soil, a deep loam. They are all large trees, and have fine heads, and are very healthy. Several of them are over 50 feet in height now. They were higher, but as I found the wind left few fruit on the higher branches, I had them shortened two years ago. A good many of the trees had the wood killed back by the frost in the winters of 1880 and 1881, but they seem to be recovering now.

4.—Mr. C. WARDEN, *Gardener to Sir F. Hervey Bathurst, Bart., Clarendon Park, Salisbury.*

Observations.—Fruit small and deficient in colour.

Exhibitor's Remarks.—The majority of our trees are Standards, but some are trained as Espaliers, the former having been planted about 50 years, the latter about 30 years. They are grafted on the Crab. Situation, sheltered on north and north-west by lofty trees. Soil, a strong loam, resting on clay, styled here London clay, which is not inviting. When the roots of the trees are allowed to get down, the fruits are generally scabby and spotted, and, besides deteriorating them in their appearance, they do not keep so well. Many of the kinds that are met with in this locality are more adapted for cider-making than as culinary or dessert. "Ducket" (Ducat) is an excellent Apple for cooking, and an abundant bearer generally. The orchards in this district contain too many inferior varieties.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Lord Suffield, Ecklinville Seedling, Cox's Pomona, Pott's Seedling, Emperor Alexander, Stirling Castle, Reinette de Canada, New Hawthornden, Warner's King, Bedfordshire Foundling, Golden Noble, Dumelow's Seedling, Cellini, King of the Pippins, Blenheim Orange, Cox's Orange, Ribston, Scarlet Nonpareil, Bedfordshire Foundling, King of Tomkin's County, Mère de Ménage, Lane's Prince Albert, Lady Sudeley, Stone's Apple.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Lord Suffield, Bedfordshire Foundling, Emperor Alexander, Dumelow's Seedling, Ecklinville Seedling, Cox's Pomona, New Hawthornden, King of Tomkin's County, Mère de Ménage, Lane's Prince Albert.

Varieties of Apples suitable for Cultivation in Wiltshire.

SELECTED (1883) BY

- Mr. G. ALLEN, *Ramsbury Manor, Hungerford.*
- „ J. HORSEFIELD, *Heytesbury.*
- „ REDDINGTON, *Littlecote, Hungerford.*
- „ C. WARDEN, *Clarendon Park, Salisbury.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . .	2	Devonshire Quarrenden	1
Blenheim Orange . . .		Downton Pippin . . .	
Golden Pippin . . .		Golden Reinette . . .	
Irish Peach . . .		Isle of Wight Pippin . .	
King of the Pippins . . .		Magnum Bonum . . .	
Lemon Pippin . . .		Margil . . .	
Ribston Pippin . . .		Newtown Pippin . . .	
Sturmer Pippin . . .		Rosemary Russet . . .	
Wormsley Pippin . . .	1	Syke House Russet . . .	
Ashmead's Kernel . . .		White Juneating . . .	
Court Pendu Plat . . .		Worcester Pearman . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Keswick Codlin . . .	4	Cox's Pomona . . .	1
Lord Suffield . . .		Crimson Queening . . .	
Hawthornden, Old . . .		Dutch Mignonne . . .	
Hawthornden, New . . .	3	Emperor Alexander . . .	
Blenheim Orange . . .		Jolly Beggar . . .	
Dumelow's Seedling . . .	2	Kentish Fillbasket . . .	
Manks' Codlin . . .		Mère de Ménage . . .	
Annie Elizabeth . . .	1	Norfolk Beefing . . .	
Beauty of Kent . . .		Northern Greening . . .	
Bess Pool . . .		Prophet . . .	
Betty Geeson . . .		Royal Russet . . .	
Catshead . . .		Stirling Castle . . .	
Cellini . . .		Warner's King . . .	

GROUP II.

EASTERN COUNTIES.

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1. CAMBRIDGESHIRE	179
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CAMBRIDGESHIRE.*Exhibitor.*

1.—Mr. ARTHUR BULL, *Bernard House, Cambridge.*

Exhibitor's Remarks.—Grown on Standard trees, grafted mostly on the Crab stock. Situation, open. Soil, a brick loam; subsoil, blue clay. When I visited the Show, I noticed a great scarcity from Cambridge and Hants. On these grounds I beg to call attention to our local sorts:—Murfitt's Seedling, a prolific variety, in use from November till late spring. Histon Favourite, a very prolific variety, in use from July to November. For kitchen and dessert we have nothing to equal this in our neighbourhood. In the selection made, I should have liked to have included Dumelow's Seedling, but of late years it has been so much blighted that it has become useless to grow it. Mr. Gladstone, so far as I can see at present, will do well.

**List of Varieties of Apples suitable for Cultivation
in Cambridgeshire.**

SELECTED BY Mr. A. BULL, *Bernard House, Cottenham,
Cambridge.*

DESSERT APPLES.

Cox's Orange Pippin, Blenheim Orange, Histon Favourite, Irish Peach, Kerry Pippin, Lord Lennox, Mr. Gladstone, Red Juneating, Red Quarrenden.

CULINARY APPLES.

Ecklinville Seedling, Histon Favourite, Keswick Codlin, Lord Suffield, Murfitt's Seedling.

ESSEX.*Exhibitors.*

1.—MESSRS. SALTMARSH & SONS, *Nurserymen, Chelmsford.*

Exhibitors' Remarks.—Grown on various forms of trees, chiefly on the Crab stock. Situation in and near Chelmsford, for the most part low and sheltered. Soil, a rich loam, free from sand; subsoil, varying from loamy gravel to brick earth.

SELECTION OF TWENTY-FOUR DESSERT VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Red Juneating, Red Astrachan, Devonshire Quarrenden, Irish Peach, Summer Orange, Duchess of Oldenburg, Garrett's Pippin or Borsdorffer, Kerry Pippin, King of the Pippins, Cox's Orange Pippin, Fearn's Pippin, Scarlet Pearmain, Wyken Pippin, Scarlet Nonpareil, Ribston Pippin, Cockle's Pippin, Cornish Gilliflower, Old Nonpareil, Court Pendu Plat, D'Arcy Spice, Duke of Devonshire, Lemon Pippin, Bess Pool, Sturmer Pippin.

SELECTION OF TWELVE KITCHEN VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Keswick Codlin, Hawthornden, Lord Suffield, Stirling Castle, Lord Grosvenor, Warner's King, The Queen, Winter Hawthornden, Ecklinville Seedling, Waltham Abbey Seedling, Blenheim Orange, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Devonshire Quarrenden, Keswick Codlin, Garrett's Pippin, Stirling Castle, Lord Suffield, King of the Pippins, The Queen, Blenheim Orange, Cox's Orange Pippin, Wellington.

2.—MR. W. O. WARD, *Market Gardener, Ramsey, Harwich, Essex.*

Observations.—Examples small.

Exhibitor's Remarks.—Fruit grown on various forms of trees, many of them planted 40 years ago, others 25 years, and some about 4 years. They are mostly on the Apple stock. Situation, open, in the most eastern part of Essex, and nearly the most eastern part of England. Soil, a good loam; subsoil, London clay. My experience as a market gardener is this: that if I were to plant again, I would grow but few sorts, that I know to be the best and most productive, and I would prune but very little, only thinning out the branches.

3.—MR. ROBERT WARNER, *Broomfield, Chelmsford.*

Observations.—Examples small.

Exhibitor's Remarks.—The greater portion of the fruit is grown on young Standard and Pyramid trees, grafted on the common Apple stock. Situation, open. Soil, a poor friable loam, sticky when wet; subsoil, water-clay, *i.e.* a clay impervious to the passage of water. The soil is in general rather poor. Trees are in very good health on the whole. Warner's Seedling takes the first place for good cooking, keeping much longer than Warner's King, to which the habit of growth is very similar.

Varieties of Apples suitable for Cultivation in Essex.

SELECTED (1883) BY

MESSRS. SALTMARSH & SONS, *Chelmsford.*

Mr. W. O. WARD, *Harwich.*

„ ROBERT WARNER, *Chelmsford.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Court Pendu Plat . . .	2	Golden Pippin . . .	1
Cox's Orange Pippin . .		Howard's Pearmain . .	
Golden Harvey . . .		Hubbard's Pearmain . .	
Kerry Pippin . . .		Irish Peach . . .	
Summer Orange . . .		King of the Pippins . .	
Adams' Pearmain . . .	1	Lemon Pippin . . .	
Baddow Pippin . . .		Reynolds' Peach . . .	
Bess Pool . . .		Rosemary Russet . . .	
Court of Wick . . .		Royal Russet . . .	
D'Arcy Spice . . .		Russet Nonpareil . . .	
Devonshire Quarrenden		Scarlet Nonpareil . . .	
Downton Pippin . . .		Striped Juneating . . .	
Garrett's Pippin . . .		Sturmer Pippin . . .	
Gipsy King . . .		Wyken Pippin . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling . .	3	Kentish Fillbasket . .	1
Warner's King . . .		Kirke's Fame . . .	
Blenheim Orange . . .		London Pippin, im-	
Keswick Codlin . . .	2	proved . . .	
Lord Suffield . . .		Lord Derby . . .	
Sturmer Pippin . . .		New Northern Green-	
Beauty of Kent . . .	1	ing . . .	
Dr. Harvey . . .		Norfolk Bearer . . .	
Duchess of Oldenburg .		Pott's Seedling . . .	
Forge Apple . . .		The Queen . . .	
Goff . . .		Tower of Glamis . . .	
Green Beefing . . .		Wellington (Dume-	
Grenadier . . .		low's Seedling) . . .	
Hawthornden . . .		Winter Quoining . . .	
Hawthornden, New . .		Woodstock Pippin	
Hawthornden, Winter .		(Blenheim Orange)	

LINCOLNSHIRE.

Exhibitors.

- 1.—Mr. A. S. JOHNSON, *The Moor Farm, Scawby, Brigg, Lincoln.*

Observations.—Examples small, and deficient in colour.

Exhibitor's Remarks.—Grown on Standard trees, of various ages. Situation, rather open. Soil, sandy, with a clay subsoil. Out of 545 trees, about 50 have died since they were planted five years ago; some of the trees are growing very well, but in general growth is very slow.

- 2.—Mr. G. PICKER, *Gardener to A. S. Leslie Melville, Esq., Long Hills, Branston, Lincoln.*

Observations.—Examples small, and poor in quality.

Exhibitor's Remarks.—Apples were grown on Standards on the Crab. Situation, sheltered. Soil, on limestone rock, not more than 6 inches in depth. Trees in bad health through crowding and neglect. We grow about 50 sorts of Apples here.

- 3.—Messrs. ROWSON BROTHERS, *West Torrington Gardens, Wragby.*

Observations.—Fruit small, and deficient in colouring.

Exhibitors' Remarks.—Our trees are mostly Standards, and have been planted from 15 to 20 years. They are all on the Crab stock. Situation, on a small hill. Soil, sandy to the depth of 2 feet; subsoil, a gravelly clay. We grow many sorts here, as our father, when he planted the orchard 20 years ago, selected those that he knew would answer well in this neighbourhood. We beg to call special attention to Shepherd's Fame. It is a splendid Apple, and is bearing a good crop on over 30 large trees; our stock came from a tree 40 years old growing near here. King Apple (Warner's King) is a good sort, but not hardy enough for us, as the trees die back very much. Cockpit and Winter Red Streak are the two best regular bearers we have; all the sorts grown in this neighbourhood are old, but the newer ones will get introduced by degrees. Trees on the Paradise are rarely seen, but we intend planting some to try them. Our trees grow freely but do not bear much, and many of the shoots die back.

Varieties of Apples suitable for Cultivation in Lincolnshire.

SELECTED (1888) BY

Mr. A. S. JOHNSON, *Scauby, Brigg.*

„ PICKER, *Long Hills, Branston.*

Messrs. ROWSON BROTHERS, *West Torrington, Wragby.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Sturmer Pippin	2	Lord Lennox	1
American Summering . .	1	Magnum Bonum	
Blenheim Orange		Moss's Incomparable . .	
Cox's Orange Pippin . . .		Old Man	
Duke of Devonshire . . .		Peter Smith	
Early Julien		Ribston Pippin	
Garrett's Golden Pippin . .		Scarlet Nonpareil	
Golden Winter Pear- main		Shepherd's Fame	
Irish Peach		Small's Admirable	
Kerry Pippin		Winter Red Streak	
		Wyken Pippin	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling . . .	2	Hunt House Pippin . . .	1
Greenup's Pippin		Lord Suffield	
Yorkshire Greening . . .		Manks' Codlin	
Beauty of Kent		New Hawthornden	
Catshead		Norfolk Bearer	
Cockpit		Normanton Wonder (Dumelow's Seedling)	
Costard		Northern Greening	
Cox's Pomona		Pike's Pearmain	
Domino	1	Kitchen Reinette	
D. T. Fish (or Warner's King)		Ringer	
Ecklinville Seedling . . .		Sleeping Beauty	
Gloria Mundi		Stirling Castle	
Golden Noble		Striped Beefing	
Gravenstein			

NORFOLK.

Exhibitors.

1.—Mr. COLVILE BROWN, *The Paddocks, Swaffham, Norfolk.*

Observations.—Examples small.

Exhibitor's Remarks.—Situation, very much exposed to gales. Soil, a sandy loam, with poor sand, and very dry. Growth appears to be at a standstill in the heat of summer. Our so-called Baxter's Pearmain, being thin skinned, spots very much. The Norfolk Stone Pippin withstands gales well, owing to the short stalk, and also to the stiff, upright growth of the trees. As far as my limited experience goes, I think it would be very unwise to discard the old favourites, although small, in favour of larger Apples, which would either be blown down by the gales or bruised on the trees. I am now planting a few Cordon Espaliers, with a view to obtain some of the larger kinds of fruit.

2.—Mr. E. BURBURY, *Cossey Park, Norwich.*

Observations.—A fairly well-grown collection.

Exhibitor's Remarks.—All grown on Standards, principally on the Crab, so far as I am able to judge. Situation, sheltered. Soil, a sandy loam; subsoil, red sand. The Ten Shillings Apple is considered to be one of the best dessert Apples here. The Hail Apple, a local variety, is excellent for kitchen use.

3.—Mr. H. G. OCLEE, *Blickling Hall Gardens, Aylsham, Norfolk.*

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Gravenstein, Cobbett's Fall Pippin, Kentish Fillbasket, Warner's King, Peasgood's Nonesuch, Hawthornden, Lane's Prince Albert, Mère de Ménage, Golden Harvey, Striped Beefing, Colonel Harbord's Pippin.

Situation, sheltered from north and north-east. Soil, subsoil, &c., sand and gravel.

General Remarks.—Apples trained as Espaliers and Bush trees preferred.

Varieties of Apples suitable for Cultivation in Norfolk.

SELECTED (1883) BY

Mr. C. BROWN, *The Paddocks, Swaffham.*

„ E. BURBURY, *Cossey Park, Norwich.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	2	Gravenstein. . . .	1
Blenheim Orange . .	1	Irish Peach	
Braddick's Nonpareil .		London Pippin. . . .	
Cornish Gilliflower. .		Nonpareil	
Devonshire Quarrenden		Nonpareil Russet . .	
Early Nonpareil . . .		Red Astrachan. . . .	
Golden Harvey		Ribston Pippin . . .	
Golden Russet		Sturmer Pippin . . .	
Golden Winter Pear-		Ten Shillings Apple .	
main.			

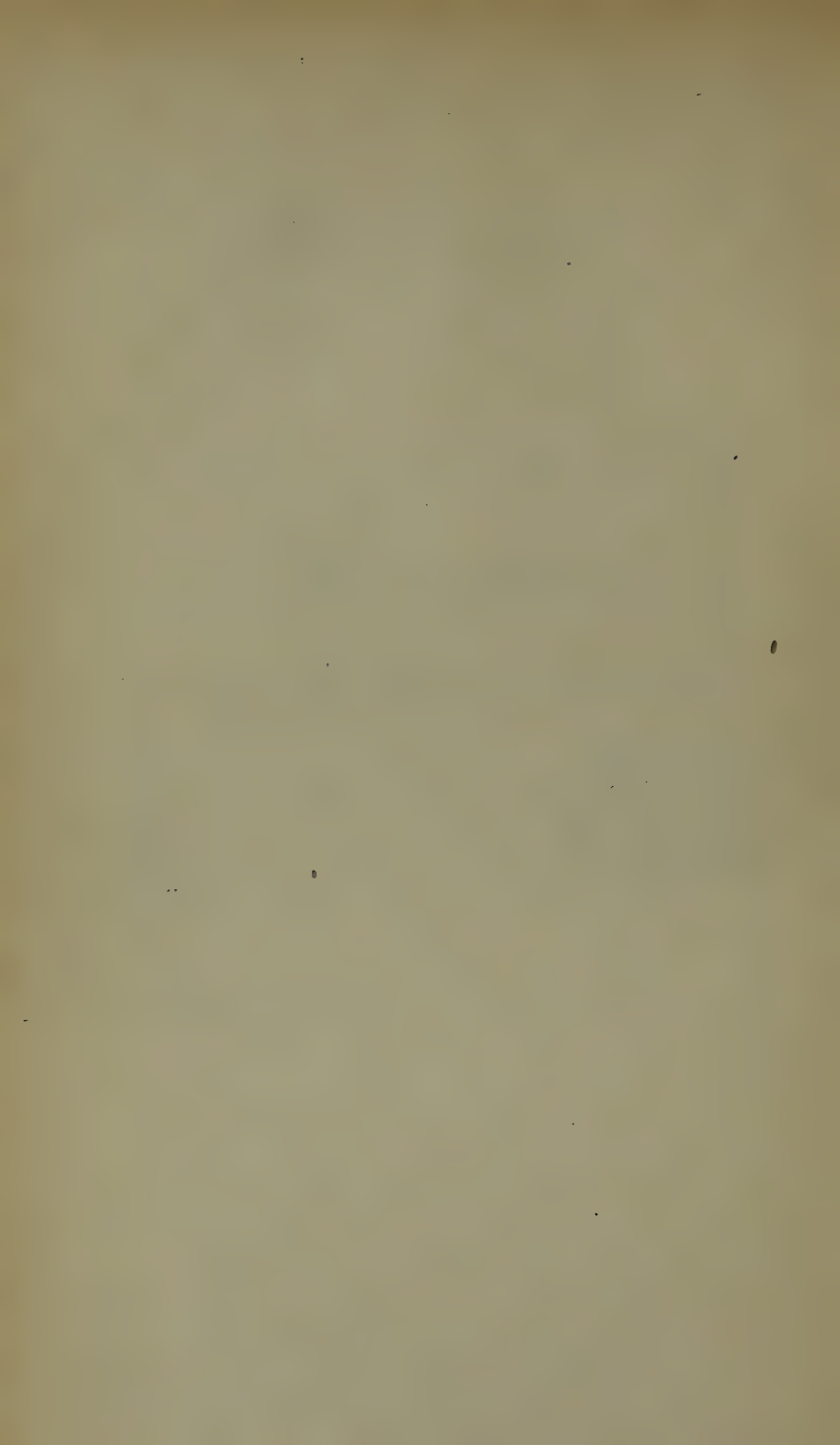
CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Baxter's Pearmain . .	2	Keswick Codlin . . .	1
Blenheim Orange . . .		Lord Suffield	
Dr. Harvey		New Hawthornden . .	
Norfolk Beefing . . .		Norfolk Stone Apple .	
Cox's Pomona	1	Patrick	
Gravenstein		Warner's King	
Hail Apple		White Pippin	
Hawthornden		Winter Majetin . . .	
Kentish Pippin			

GROUP III.

MIDLAND COUNTIES—SOUTH.

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BEDFORDSHIRE.*Exhibitor.*1.—Mr. THOMAS LAXTON, *Girtford, Bedford.*

Exhibitor's Remarks.—Grown on Bush trees, 2 to 3 years old, grafted on English Paradise. Situation, exposed, and subject to spring frosts. Soil, a sandy loam on gravel. The majority of those named bear very freely every year. Irish Peach, the Blenheim Orange, and Ribston Pippin rarely fruit well. The Old and New Hawthornden and Annie Elizabeth, good elsewhere, suffer here from canker, and do not fruit.

Varieties of Apples suited to Bedfordshire.

SELECTED BY MR. THOMAS LAXTON, *Bedford.*

DESSERT APPLES.

Court Pendu Plat, Cox's Orange Pippin, Early Julien, Franklin's Golden Pippin, Margaret, Mr. Gladstone, Quarrenden, Scarlet Pearmain, Stamford Pippin, Sturmer Pippin, Worcester Pearmain, Wyken Pippin.

CULINARY APPLES.

Cellini, Ecklinville Seedling, French Crab, Grenadier, Golden Noble, Keswick Codlin, Lord Derby, Lord Suffield, Peasgood's Nonesuch, Schoolmaster, Warner's King, Wellington (Dumelow's Seedling).

BUCKINGHAMSHIRE.*Exhibitors.*1.—Mr. A. BRIDGMAN, *Gardener to T. S. Cocks, Esq.,
Thames Bank, Marlow.*

Exhibitor's Remarks.—The best dishes in my collection were grown on young trees planted during the last 10 years, mostly Dwarf, Bush, or Espaliers, grafted on the Crab. Situation, sheltered by garden walls. The soil of the Thames valley varies in this locality from clay and marl to gravel and sand, sometimes all four occurring within a distance of a few yards. Apples planted in the marl make vigorous growth and large trees, bearing crops in favourable seasons; on a subsoil of gravel, however, they make less growth, bear far more freely, and soon wear out.

2.—Mr. H. CAKEBREAD, *Gardener to Sir T. P. Rose, Bart.,
Rayner's Place, Amersham.*

Exhibitor's Remarks.—Grown chiefly on Bush trees on the Paradise from 12 to 15 years of age, from which the finest fruit is obtained. Situation, very exposed, Soil, a heavy clay. Golden Spire is an Apple that ought to be noted as a thoroughly good kitchen variety; Ecklinville is a constant cropper in all seasons; Warner's King is also generally very fine. We are very much exposed to wind, being, I suppose, situate on the highest part of Buckinghamshire.

3.—Mr. JAMES FLETCHER, *Iver, Bucks.*

Exhibitor's Remarks.—Grown on tall Standard trees from 10 to 15 years old, grafted on the Crab. Situation, somewhat sheltered. Soil, light and gravelly; subsoil, sand and gravel. We have a few young Pyramid Apples on the Paradise stock, such as Manks' Codlin, Yellow Ingestrie, Cockle's Pippin, Cellini, and Margil, that scarcely produce anything like a crop, and the shoots canker very much.

4.—Mr. JOHN FOWLER, *Lee Manor, Great Missenden, Bucks.*

Exhibitor's Remarks.—The village of Lee is on the summit of the beech-clad Chiltern Hills, in Bucks. Soil, a stiff red clay, mixed with large flints, resting on chalk. Apple No. 1 is locally called "The Bazeley," or Lee Apple, and seems indigenous to this district.

5. Mr. G. T. MILES, *Gardener to Lord Carington, Wycombe Abbey, High Wycombe.*

Observations.—Special interest was attached to this collection, Mr. Miles having instructively arranged the varieties grown on different stocks in distinct groups; those stated to have been grown on Cordons and Bush trees on the Paradise stock being much larger.

Exhibitor's Remarks.—Situation, in garden, sheltered. Soil, a light dark loam; subsoil of vegetable peat, and very moist. The trees grown under the foregoing conditions produce fruit abundantly, very clear and good, and above the ordinary size. The old-fashioned table-topped trees are remarkably stiff and make vigorous growth, therefore the fruit is never damaged by wind on such trees. The trees which produce the finest fruit are on Paradise stocks, but these have special attention in regard to thinning the fruit, &c.

6.—Mr. J. SMITH, *Gardener to Lord Rosebery, Mentmore, Leighton Buzzard.*

Exhibitor's Remarks.—Our largest and finest fruit are from small Bush trees on the Paradise stock. Trees all grow freely and are free from canker or blight of any sort. Situation, exposed to east and south, sheltered from north and west. Soil, a strong loam on clay.

7.—Mr. C. TURNER, *Royal Nurseries, Slough.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Gladstone, Astrachan, Quarrenden, Lord Suffield, Stirling Castle, Frogmore Prolific, Keswick Codlin, Cox's Pomona, Cellini Pippin, Grenadier, Duchess's Favourite, King of the Pippins, Blenheim Orange, Scarlet Pearmain, Winter Hawthornden, Cox's Orange Pippin, Beauty of Kent, Kentish Fillbasket, Fearn's Pippin, Rosemary Russet, Scarlet Nonpareil, Prince Albert, Hanwell Souring, Wellington.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Quarrenden, Lord Suffield, Stirling Castle, Ecklinville, Cellini Pippin, Blenheim, Cox's Orange, Rosemary Russet, Fearn's Pippin, Prince Albert, Scarlet Nonpareil, Wellington.

Exhibitor's Remarks.—Grown in all kinds of situations, and grafted on the Crab and Paradise stocks ; soil heavy.

8.—MESSRS. JAMES VEITCH & SONS, *Langley.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT.

Lord Suffield, Pott's Seedling, Stirling Castle, Worcester Pearmain, Warner's King, Cellini, Blenheim Pippin, Northern Greening, Dumelow's Seedling, Alfriston, Baumann's Red Reinette, Reinette de Canada, White Juneating, Devonshire Quarrenden, Kerry Pippin, American Mother, King of the Pippins, Cox's Orange Pippin, Ribston Pippin, Mannington's Pearmain, Adams' Pearmain, Lord Burghley, Cockle's Pippin, Old Nonpareil.

Situation, very open and exposed ; subsoil, heavy loamy soil about 12 inches in depth, over a pan 3 feet to 6 feet of brick earth with gravel underneath.

General Remarks.—All Apples exhibited are from young trees, pyramid and horizontal, principally on English Paradise, which receive the usual treatment as to pruning, that is to say, being pruned into shapely trees in the winter, and having the long shoots shortened in the summer.

List of Varieties of Apples suitable for Cultivation in Buckinghamshire.

SELECTED (1888) BY

Mr. A. BRIDGMAN, *Marlow.*

„ H. CAKERREAD, *Rayner's Place, Amersham.*

„ J. FLETCHER, *Iver.*

„ G. T. MILES, *High Wycombe.*

„ J. SMITH, *Mentmore, Leighton Buzzard.*

„ C. TURNER, *Slough.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins .	6	Braddick's Nonpareil	1
Cox's Orange Pippin .	5	Downton Pippin . .	
Ribston Pippin . . . }	4	Emperor Napoleon .	
Kerry Pippin }		Frogmore Nonpareil .	
Irish Peach	3	Golden Russet . . .	
Adams' Pearmain . .	2	Mannington's Pearmain	
Claygate Pearmain . .		Margil	
Cockle's Pippin . . .		Mr. Gladstone . . .	
Court of Wick . . .		Parry's Pearmain . .	
Court Pendu Plat . .		Pearson's Plate . . .	
Devonshire Quarrenden	1	Pitmaston Pine Apple	
Fearn's Pippin . . .		Rosemary Russet . .	
Golden Reinette . . .		Scarlet Pearmain . .	
Scarlet Nonpareil . .		Sturmer Pippin . . .	
Worcester Pearmain .		Summer Pearmain (?)	
Astrachan (Red) . . .	1	Wyken Pippin . . .	
Ashmead's Kernel . .			
Blenheim Orange . .			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield . . .	5	Beauty of Kent . . .	1
Blenheim Orange . .		Betty Geeson . . .	
Dumelow's Seedling .		Calville Boisbunel .	
Golden Noble . . .	4	Frogmore Prolific . .	
Keswick Codlin . . .		Golden Spire . . .	
Cellini		Grenadier	
Cox's Pomona . . .	3	Hanwell Souring . .	
Ecklinville Seedling .		Hollandbury . . .	
Emperor Alexander .		Kentish Broading . .	
Hawthornden . . .		Lady Henniker . . .	
Lord Derby	2	Lane's Prince Albert	
Lord Grosvenor . . .		New Hawthornden .	
Manks' Codlin . . .		Norfolk Beefing . .	
Mère de Ménage . .		Peasgood's Nonesuch	
Warner's King . . .		Rosemary Russet . .	
Alfriston		Waltham Abbey Seedling	
		Yorkshire Greening .	

HERTFORDSHIRE.

*Exhibitors.*1.—Messrs. H. LANE & SON, *The Nurseries, Great Berkhamstead.*

Exhibitors' Remarks.—Situation of orchards, on high grounds, sheltered only by hedges and other fruit trees. Soil, vegetable mould 10 inches deep, with flint stones; subsoil, a strong yellow clay with flint. In the selection of sorts, the following are omitted as being tender, viz.:—Emperor Alexander, Calville Blanche, Cellini, Flower of Kent, Golden Noble, Lord Suffield, Pott's Seedling, Reinette de Canada. Trees mostly grown in the Bush form.

2.—Mr. J. LATTA, *Bury Gardens, Herts.*

Exhibitor's Remarks.—Grown on Standards probably 50 years old, grafted on the Crab. Situation, low and well sheltered, but liable to late spring frosts. Soil, medium; subsoil, gravelly in some places, clay and chalk in others. Apples this season have been small, poor in colour, and badly spotted.

3.—Mr. J. C. MUNDELL, *Moor Park, Rickmansworth.*

Exhibitor's Remarks.—Grown on Bush trees, trained with open centre, which I find the best. They are grafted chiefly on the Paradise stock. Situation, in walled garden, sheltered by trees, with aspect S.S.E., and 340 feet above sea level. Soil, varied. I find the trees growing on light soil, with gravel subsoil, do the best. Fruit, especially Apples, do remarkably well in this locality.

4.—Messrs. PAUL & SON, *Nurserymen, Cheshunt.*

Exhibitors' Remarks.—Fruit grown mostly on Pyramids and Espaliers, 5 to 8 years old, grafted on Crab and Paradise, but chiefly on Paradise. Situation, about 100 feet above sea-level, in several parts of the nursery fairly sheltered. Soil, a deep alluvial loam (brick earth), with gravel subsoil. Apples do well here (Cheshunt), seldom failing to carry a good crop. There are only two market orchards exceeding two acres, our own and one of 20 acres on the Roupell estate, but considerable quantities of fruit are sent to market from cottage gardens, and trees planted in accommodation paddocks on grass. In fresh planting here, and in the whole valley of the Lea, it is desirable to select late flowering sorts, as Adams' Pearmain, the valley being subject to spring frosts, which these sorts escape. We prune twice a year, once in March, again in September.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

These are selected from kinds doing best as Pyramids in the nursery, the only test applied.

Cox's Orange, Lord Suffield, Stirling Castle, Blenheim Orange, Ecklinville, King of the Pippins, Warner's King, Peasgood's Nonesuch, Stone's Pippin, Golden Noble, Wellington, Keswick, Paul's, New Winter Hawthornden, Cox's Pomona, Ribston, Courcelles, Fearn's Pippin, Cheshunt Pippin, Tibbet's Incomparable, Adams' Pearmain, Alfriston, Cellini, Mère de Ménage, Lady Henniker.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Cox's Orange Pippin, Lord Suffield, Stirling Castle, Blenheim Orange, King of the Pippins, Warner's King, Peasgood's Nonesuch, Ecklinville Seedling, Stone's Apple, Golden Noble, Wellington, Keswick Codlin.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Keswick, Blenheim Orange, Dredge's Fame, Wellington, Lord Suffield, Tower of Glamis, King of the Pippins, Tibbet's Incomparable, are the sorts in the only two considerable orchards in Cheshunt; King of the Pippins and Keswick Codlin are also largely grown in the adjoining parish of Enfield.

5.—MESSRS. WM. PAUL & SON, *Nurserymen, &c., Waltham Cross.*

Exhibitors' Remarks.—We grow our fruit principally on young Pyramids, grafted on a variety of stocks—Apple, Crab, Doucin, and Paradise. Situation, open, low, and moist. Soil, a strong loam; subsoil, gravel. Ground dug over and manured annually. We have found it no easy matter to reduce the number of Apples (of which there are, in our judgment, scores of first class quality) to so small a compass. In doing this we have taken the earliest and the latest, and then filled in the interval with sorts furnishing a succession, so that Apples may be in use nearly the whole year round. Hardiness of sorts, with freedom and constancy of bearing, have also largely influenced us in our selection.

6.—MESSRS. T. RIVERS & SON, *Nurserymen, Sawbridgeworth, Herts.*

Exhibitors' Remarks.—Fruit grown on Pyramids, Cordons, and Bushes, grafted on the Nonesuch Paradise stock and on the Crab. Situation, exposed. The soil of this parish consists generally of drift clay and calcareous gravel, fertile but not rich. The climate is too keen to secure the size and colour of the Kentish Apple Orchards. The crops are good and abundant this season.

Varieties of Apples suitable for Cultivation in Hertfordshire.

SELECTED (1883) BY

MESSRS. H. LANE & SON, *The Nurseries, Berkhamstead.*

MR. J. C. MUNDELL, *Moor Park, Rickmansworth.*

MESSRS. PAUL & SON, *Old Nurseries, Cheshunt.*

„ WM. PAUL & SON, *The Nurseries, Waltham Cross.*

„ T. RIVERS & SON, *The Nurseries, Sawbridgeworth.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . . }	5	Court Pendu Plat . . . }	1
King of the Pippins . . . }		Court of Wick . . . }	
Adams' Pearmain . . . }		Devonshire Quarren-	
Braddick's Nonpareil . . . }	8	den }	
Claygate Pearmain . . . }		Duchess of Oldenburg	
Kerry Pippin }		Early Julien }	
Ribston Pippin }		Early Red Margaret .	
Fearn's Pippin }	2	Golden Harvey }	
Irish Peach }		Lemon Pippin }	
Mabbott's Pearmain . . . }		Mannington's Pear-	
Mr. Gladstone }		main }	
Scarlet Nonpareil }		Margil }	
Wyken or Warwickshire		Moor Park Pippin . . . }	
Worcester Pearmain . . . }	1	Pine Golden Pippin . . . }	
Sturmer Pippin }		Scarlet Golden Pippin	
Allen's Everlasting . . . }		Summer Pippin }	
Blenheim Orange }		White Nonpareil }	
Boston Russet }		Wormsley Pippin . . . }	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Keswick Codlin }	5	Betty Geeson }	1
Blenheim Orange }		Cox's Pomona }	
Lord Suffield }	4	Dredge's Fame }	
Cellini }		Duchess of Oldenburg	
Dumelow's Seedling . . . }	3	Grenadier }	
Stirling Castle }		Golden Noble }	
Alfriston }		Golden Stranger }	
Ecklinville Seedling . . . }	2	Hawthornden }	
New Hawthornden }		Hoary Morning }	
Lord Derby }		Jolly Beggar }	
Lord Grosvenor }		Norfolk Beefing }	
Manks' Codlin }		Northern Greening . . . }	
Rymer }	1	Lane's Prince Albert	
Tower of Glamis }		Small's Admirable . . . }	
Warner's King }		Stone's or Lodding-	
Alexander (Emperor) . . . }		ton Seedling }	
Beauty of Kent }			

HUNTINGDONSHIRE.

Exhibitors.

- 1.—Mr. A. HARDING, *Gardener to the Dowager Marchioness of Huntly, Orton Hall, Peterborough.*

Exhibitor's Remarks.—Grown principally on old orchard Standards; but a few of the largest kinds are from pruned Bushes about 10 years old, and mainly on the Crab stock. Situation, partially sheltered. Soil, a loam, resting on gravel. If only two kinds of Apples were to be grown here, the palm would certainly be with Keswick Codlin as a culinary kind, and King of the Pippins as a dessert sort. For annual bearing and general usefulness they are not to be surpassed.

- 2.—Messrs. WOOD & INGRAM, *Nurserymen, Huntingdon.*

Exhibitors' Remarks.—All grown on Standards, grafted on the Crab in the orchards and market gardens in Cambridgeshire and Huntingdonshire. Situation not sheltered. Soil, a light loam; subsoil, principally gravel, but in some parts clay. The growers in Cambridgeshire are planting principally Murfitt's Seedling and Histon Favourite.

Varieties of Apples suitable for Cultivation in Huntingdonshire.

SELECTED (1883) BY

Mr. A. HARDING, *Orton Hall Gardens, Peterborough.*
Messrs. WOOD & INGRAM, *Nurserymen, Huntingdon.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins . . .	2	Latour's Golden Pippin . . .	1
Ribston Pippin . . .		Lord Lennox . . .	
Yellow Ingestrie . . .		Old Nonpareil . . .	
Blenheim Orange . . .		Pine Apple Russet . . .	
Court of Wick . . .	1	Red Quarrenden . . .	
Cox's Orange Pippin . . .		Scarlet Nonpareil . . .	
Golden Pippin . . .		Sturmer Pippin . . .	
Kerry Pippin . . .		Worcester Pearmain . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling	2	Minchall Crab	1
Keswick Codlin		Murfitt's Seedling	
Baldwin		New Hawthornden	
Barton's Free Bearer		Nonesuch	
Bedfordshire Foundling		Normanton Wonder (Dumelow's Seedling)	
Blenheim Orange	1	Norfolk Beefing	
Borovitsky (Duchess of Oldenburg)		Royal Pearmain	
Brabant Bellefleur		Striped Beefing	
Cellini		Warner's King	
Dutch Codlin		Wellington (Dumelow's Seedling)	
Histon Favourite		Winter Greening	
Huntingdon Codlin			
Lord Suffield			

OXFORDSHIRE.

Exhibitors.

1.—MESSRS. J. JEFFERIES & Co., Nurserymen, &c., Oxford.

Exhibitors' Remarks.—Collected from many and widely distant localities of the county, a large proportion being the production of orchards which are exclusively Standards that have borne fruit for many generations. These are chiefly on the Crab, but those exhibited from garden collections are from Espalier or Pyramidal trees of various ages, mostly on the Paradise. The soil varies from a fertile tenacious loam—a decomposed stone-brash or limestone, or a light sandy loam—with subsoils of clay or chalk.

The varieties of apples most extensively grown in the orchards of this county are Blenheim Orange and Hanwell Souring; of the former variety there are many trees that have been obtained from kernels, and these produce fruit varying more or less from what is regarded as the typical sort. There are certain trees that have gained a local fame on account of their producing uniformly juicy, rich, sugary-flavoured Apples, by which they are distinguished from fruit of the same kind from trees growing under precisely similar conditions that do not partake of these qualities in a corresponding degree. The vigour manifested by many of the most aged trees serves to indicate not only the situations eminently suitable for forming new orchards,

but illustrates a successful method of planting, as understood generations back; and the trees cannot but be regarded as memorials of a spirit of enterprise that once existed among those who achieved something wherewith to benefit posterity.

The acreage of the county is 470,095 acres, and of this total 1,370 acres only are devoted to orchards. With these figures in view, it cannot be doubted that a greatly extended cultivation of Apples would be attended with the most satisfactory results.

It cannot be too forcibly impressed on planters that it is not sufficient to make a good selection of well-grown trees, to convey them carefully to their allotted places, there to plant them, and, after securing them to stakes, abandon them to the elements.

In many instances the operation of planting Apple trees is performed by those insufficiently tutored to the task; due attention is not given to a proper disposition of the roots, or to the surface on which they are placed; and it too frequently happens that the process of planting would be more fitly described as that of unconscious burying; moreover, the attention afterwards bestowed on them is often occasioned by the necessity of remedying defects arising from neglect or mismanagement.

List of Varieties of Apples suitable for Cultivation in Oxfordshire.

SELECTED BY MESSRS. J. JEFFERIES & Co., *Nurserymen, Oxford.*

Dessert Apples.—Borsdorffer, Cockle's Pippin, Cox's Orange Pippin, Devonshire Quarrenden, Fearn's Pippin, Golden Winter Pearmain, Kerry Pippin, Margil, Ribston Pippin, Sturmer Pippin, Wyken Pippin, Yellow Ingestrie.

Culinary Apples.—Beauty of Kent, Blenheim Orange, Cellini, Dumelow's Seedling, Ecklinville Seedling, Golden Noble, Hanwell Souring, Hawthornden, Lord Suffield, Mère de Ménage, Stirling Castle, Warner's King.

GROUP IV.

MIDLAND COUNTIES—NORTH.

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CHESHIRE.

*Exhibitors.*1.—Mr. J. BANCROFT, *Audlem, Cheshire.*

Observations.—Examples small and deficient in colour. A well-prepared table, stating use, season, where grown—in garden or elsewhere—kind of tree, &c., accompanied this collection, which added much to the interest.

Exhibitor's Remarks.—Grown in gardens and orchards, on old Standard trees, grafted on stocks raised chiefly from Apple "Pippins." Situation, exposed. Soil, a brown loam, with a clay subsoil. Apples in this neighbourhood are frequently called by many different names; also one name is frequently given to many distinct varieties of apples. I know personally that there are ten distinct varieties all called "John" Apples, so that local names cannot be relied on.

2.—Messrs. F. & A. DICKSON, *Nurserymen, Chester.*

Observations.—A remarkably fine collection, the examples large and well grown.

Exhibitors' Remarks.—Gathered from Bush and Pyramid trees, from 3 to 6 years old, grafted on the Paradise stock. Situation, open, fully exposed to winds. Soil, a light loam, on sandy subsoil.

It is very evident that the Paradise stock is the best suited for the forms of trees which produce such fine fruit, and it is certainly so for small gardens.

3.—Messrs. JAMES DICKSON & SON, *Newton Nurseries, Chester.*

Exhibitors' Remarks.—Fruit grown on Bush and Pyramid trees from 2 to 7 years old. Situation open, and exposed to all winds. Soil, a friable loam, suitable for all kinds of fruit trees; subsoil, a stiff red clay.

Trees in this district grow freely, and generally bear fair, and sometimes very heavy crops. The spring frosts occasionally destroy the early blossoms, which the late blooming kinds usually escape.

4.—Messrs. S. LEDSHAM & SON, *Green Lanes, Tarvin Road, Chester.*

Observations.—Examples well grown.

Exhibitors' Remarks.—Fruit grown on half Standard and Bush trees, grafted on the Crab stock; some being on inferior sorts of Apples. Situation exposed. Soil, strong, with a clay subsoil.

For miles around the country is level and well covered with trees. There are many other good sorts in this district besides those named, which we grow. In Cranston's catalogue we find Maltster described as a large and excellent culinary Apple. We have never found it to cook well here.

5.—BENJAMIN C. ROBERTS, Esq., *Oakfield, Chester.*

Mr. J. MADDOCKS, *Gardener.*

Observations.—Examples large and well grown.

Exhibitor's Remarks.—Grown on Bush and Espalier trained trees, the dessert varieties being on the former, the culinary on the latter; mostly on Crab stocks. Situation, sheltered on the west. Soil, a stiff loam, 15 inches; subsoil, "ramel" and clay.

6.—Mr. SELWOOD, *Gardener to the Duke of Westminster, Eaton Hall, Chester.*

Observations.—Specimens large and well grown, but somewhat deficient in colour.

Exhibitor's Remarks.—Most of the dessert varieties grown on Espaliers, the others on Bush trees 7 years old. Some trees are very old, but still bear fine fruit, the bulk being worked on the Crab stock, a few on Paradise. Situation, sheltered. Soil, heavy, rich but shallow, with a wet clay bottom, making close draining necessary. This is a good Apple neighbourhood, and a crop more or less can generally be depended on.

Varieties of Apples suitable for Cultivation in Cheshire.

SELECTED (1883) BY

Mr. J. BANCROFT, *Audlem.*

MESSRS. J. DICKSON & SON, *Chester.*

„ F. & A. DICKSON & SON, *Chester.*

„ S. LEDSHAM & SON, *Chester.*

C. ROBERTS, Esq., *Oakfield, Chester.*

Mr. J. SELWOOD, *Eaton Hall, Chester.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Irish Peach	4	Braddick's Nonpareil	1
Blenheim Orange		Christie's Pippin	
Cox's Orange Pippin		Coe's Golden Drop	
Ribston Pippin		Congleton Pippin	
Kerry Pippin	3	Court Pendu Plat	
Adams' Pearmain		Early Harvest	
Court of Wick		Fearn's Pippin	
Early Margaret		Forge Apple	
Golden Pippin	2	Juneating	
Golden Reinette		Mannington's Pearmain	
Golden Winter Pearmain		Margaret	
King of the Pippins		Margil	
Maltster	1	Oslin	
Mr. Gladstone		Pine Golden Pippin	
Newtown Pippin		Red Astrachan	
Nonpareil		Russet	
Sturmer Pippin	1	Scarlet Pearmain	
American Mother		Whorle Pippin	
Barchard's Seedling			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield	6	Betty Geeson	1
Cellini		Blenheim Orange	
Dumelow's Seedling		Emperor Alexander	
Keswick Codlin		Gloria Mundi	
Alfriston	4	Greenup's Pippin	
Ecklinville Seedling		John Apple	
Golden Noble		Long Keeper	
Warner's King		Lord Derby	
Winter Hawthornden	3	Manks' Codlin	
Annie Elizabeth		Nelson's Glory	
Cox's Pomona		Norfolk Beefing	
Hawthornden		Open Hearts	
Lord Grosvenor	2	Pott's Seedling	
Mère de Ménage		Queen Caroline	
Minchall Crab		Small's Admirable	
Stirling Castle		Yorkshire Greening	
Wareham Russet			

LEICESTERSHIRE.*Exhibitors.*

1.—Messrs. HARRISON & SONS, *Nurserymen, Leicester.*

Observations.—A fairly well-grown and representative collection, but small and deficient in colour. A list of the varieties, stating the locality where grown, kind of subsoil, &c., was submitted, adding interest to the display.

Exhibitors' Remarks.—The greater part of the fruit from aged Standards, some few being from young trees growing in a natural manner, and mostly grafted on the Crab. Situation, moderately exposed. Soil, gravel in most cases, in others red clay. This is not a county in which Apples are grown extensively or considered of much importance, as they are planted in orchards kept in grass for many years. In gardens they are allowed to grow into Standard trees, without either manure or management. In some parts, where planted on gravelly subsoil, they succeed fairly; but the red clay predominates here, and this is too cold for Apples in most seasons.

Varieties of Apples suitable for Cultivation in Leicestershire.

SELECTED BY MESSRS. HARRISON & SONS, *Nurserymen.*

Dessert.—Blenheim Orange, Court Pendu Plat, Court of Wick, Cox's Orange Pippin, Fearn's Pippin, Golden Russet, Kerry Pippin, King of the Pippins, Old Bess Pool, Ribston Pippin, Scarlet Nonpareil, Wyken.

Culinary.—Annie Elizabeth, Cellini, Costard, Duchess of Oldenburg, Dumelow's Seedling, Hawthornden, Keswick Codlin, Lord Suffield, Northern Greening, Queen Caroline, Rymer, Warner's King.

NORTHAMPTONSHIRE.

Exhibitors.

1.—Mr. R. GILBERT, *Gardener to the Marquis of Exeter, Burghley, Stamford.*

Exhibitor's Remarks.—Of the varieties exhibited, 23 are seedlings raised here. They have been grown on Bush and Standard trees in the gardens, mostly grafted on the Crab. Situation, very high and flat, with little shelter excepting from the garden walls. Soil, a sandy loam 2 to 3 feet deep, resting on red sand and ironstone in some places, in others on small gravelly stones. A great many of the trees are very unhealthy, and have died back a good deal in the kitchen garden; whilst those planted in the new orchard three years ago are remarkably healthy and vigorous, although much more exposed. Apples do not attain such a high colour here as they do in most places.

2.—Mr. T. SHORTT, *Gardener to Sir E. G. Loder, Floore, Weedon.*

Exhibitor's Remarks.—This parish is remarkable for having crops of Apples when few are to be found elsewhere. There are many old varieties grown here having curious local names.

List of Varieties of Apples suitable for Cultivation in Northamptonshire.

SELECTED (1883) BY

Mr. R. GILBERT, *Burghley, Stamford.*

„ J. HARLOCK, *Lilford, Oundle.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Claygate Pearmain . . }	2	Fearn's Pippin . . . }	1
King of the Pippins . . }		Hicks' Fancy . . . }	
Wyken Pippin . . . }		Lady Lennox . . . }	
Barnack Beauty . . }	1	Lemon Pippin . . . }	
Cockle's Pippin . . . }		Maltster }	
Court of Wick . . . }		Sell's Prolific . . . }	
Cox's Pomona . . . }		Sturmer Pippin . . . }	
Devonshire Quarrenden }		The March Queen . . }	
Dutch Mignonne . . }		Worcester Pearmain . . }	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Pippin . . . }	2	Emperor Alexander . . }	1
Keswick Codlin . . . }		Golden Noble }	
Warner's King . . . }		Loddington Seedling . . }	
Alfriston }	1	Lord Grosvenor . . . }	
Beauty of Hants . . . }		Lord Suffield }	
Betty Geeson }		Manks' Codlin }	
Catshead }		Mère de Ménage . . . }	
Cellini }		Wellington (Dumelow's Seedling) . . }	
Costard }		Yorkshire Greening . . }	
Duke of Gloucester . . }			
Dumelow's Seedling . . }			
Ecklinville Seedling . . }			

NOTTINGHAMSHIRE.

Exhibitors.

- 1.—Mr. H. BRADLEY, *Nurseries, Halam, Southwell, Notts.*

Observations.—A very fine lot of fruit, each sort being exhibited in a small box prominently labelled with the name of the variety, and stating whether the specimens were of average size or not, also the nature or kind of stock on which they were grafted; thus affording great interest.

Exhibitor's Remarks.—Grown on different kinds of trees and on various stocks. Situation, in a somewhat sheltered valley at the foot of the northern slope of hills, about four miles north-west of the River Trent. Soil, a deep rich loam with a clay subsoil.

- 2.—Mr. HY. FRETtingham, *The Nurseries, Beeston, Notts.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Duchess of Oldenburg, Lord Suffield, Domino, Worcester Pearmain, Maltster, Peasgood's Nonesuch, Lord Derby, Spencer's Favourite, Lady Henniker, King of the Pippins, Kerry Pippin, Lord Lennox, Warner's King, Blenheim Orange, Caldwell Improved, Stent's Incomparable, Northern Greening Improved, Ribston Pippin, Cox's Orange Pippin, Bess Pool Improved, Normanton Wonder, Bramley's Seedling, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Duchess of Oldenburg, Domino, Peasgood's Nonesuch, King of the Pippins, Kerry Pippin, Warner's King, Blenheim Orange, Stent's Incomparable, Northern Greening Improved, Cox's Orange Pippin, Bramley's Seedling.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Duchess of Oldenburg, Domino, Lord Grosvenor, Spencer's Favourite, Lord Lennox, Warner's King, Northern Greening Improved, Blenheim Orange, Stent's Incomparable, Bramley's Seedling.

Exhibitor's Remarks.—Situation moderately sheltered. Character of soil, variable, from light sandy soil to heavy loam; subsoil, mostly gravelly.

General Remarks.—Stocks, mostly Crab. Standards grown in orchards. Pruning not much practised. Several of the varieties named above are local sorts, but are popular in this district.

8.—Mr. HENRY MERRYWEATHER, *The Nurseries, Southwell, Notts.*

Exhibitor's Remarks.—Bramley's Seedling Apple was raised at Southwell by Mr. Bramley, and has been grown in the neighbourhood for years. We believe it to be the finest marketing Apple in cultivation. It is a very free-bearing variety, having a bold, hardy blossom. It is ready for use as soon as gathered, and will keep good until June.

4.—Messrs. J. R. PEARSON & SON, *Chilwell Nurseries, Beeston, Notts.*

Observations.—A very instructive contribution, illustrative of pure orchard culture.

Exhibitors' Remarks.—The greater part of the fruit is from Standard orchard trees, from 50 to 60 years old, grown on the Crab stock; a few from the nursery, on Paradise. Situation, on the south slope of a hill, but not otherwise sheltered. Soil, clay—both soil and subsoil.

5.—Mr. N. H. POWNALL, *Linton Hall Gardens, Nottingham.*

Exhibitor's Remarks.—About Nottingham, Spencer's Seedling is the common name of the Apple sent; an older local name given to it is Spencer's Favourite. Brown's Queen Caroline, or Brown's Seedling, is said about Birmingham to be the right name, as it was raised by a nurseryman at Measham, near Ashby-de-la-Zouch, and came into bearing when Queen Caroline's cause was in the law courts—hence its name.

Varieties of Apples suitable for Cultivation in Nottinghamshire.

SELECTED (1883) BY Mr. H. BRADLEY, *Southwell*, and
Messrs. J. R. PEARSON & SONS, *Chilwell*.

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange . . .	2	King of the Pippins . . .	1
Cox's Orange Pippin . . .		Margil	
Lord Lennox		Mr. Gladstone	
Bess Pool	1	Muss Russet	
Bridgewater Pippin . . .		New Bess Pool	
Court Pendu Plat		Old Nonpareil	
Eve (or Trumpington)		Pearmain, Golden	
Herefordshire Pearmain		Pike's Pearmain	
Improved Bess Pool . . .		Scarlet Nonpareil	
Irish Peach		Sturmer Pippin	
Juneating White		Woolaton Pippin	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Domino	2	New Caldwell	1
Duchess of Oldenburg		New Hawthornden . .	
Keswick Codlin . . .		New Northern Green- ing	
Alfriston		Northern Greening . .	
American Grindling .	1	Oslin (Golden Noble)	
Beauty of Kent . . .		Pott's Seedling . . .	
Bramley's Seedling . .		S. B. Seedling . . .	
Cellini		Small's Admirable . .	
Dumelow's Seedling . .		Spencer's Seedling . .	
Ecklinville Seedling . .			
Lord Suffield			

RUTLANDSHIRE.

Exhibitors.

1.—Mr. W. H. DIVERS, *The Gardens, Ketton Hall, Stamford, Rutlandshire.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Early Margaret, Keswick Codlin, Lord Grosvenor, Ecklinville Seedling, Manks' Codlin, Costard, Duke of Gloucester, Worcester Pearmain, Prior's Red, Cox's Pomona, King of Pippins, Golden Noble, Carlton Seedling, Blenheim Pippin, Cox's Orange Pippin, Kentish Fillbasket, Wyken Pippin, Hereford Pearmain, Reinette de Canada, Dumelow's Seedling, Dutch Mignonne, Alfriston, Barnack Beauty, Duke of Devonshire.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Early Margaret, Ecklinville Seedling, Duke of Gloucester, King of Pippins, Golden Noble, Carlton Seedling, Blenheim Pippin, Cox's Orange Pippin, Hereford Pearmain, Dumelow's Seedling, Barnack Beauty, Duke of Devonshire.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Keswick Codlin, Lord Grosvenor, Ecklinville Seedling, Costard, Duke of Gloucester, Golden Noble, Carlton Seedling, Blenheim Pippin, Dumelow's Seedling, Barnack Beauty.

Exhibitor's Remarks.—None are grown expressly for market in this district. Situation, sheltered, at the bottom of a valley close to the river Chater—the coldest place in the neighbourhood. Apple trees are well sheltered by forest trees. Soil, part old garden, part clayey loam; subsoil, limestone, containing a lot of ironstone in many places.

General Remarks.—Standard trees are preferred if the situation is not too much exposed; very little pruning is done, except when in a young state, to obtain a well balanced head, and when large, a few of the weaker branches are thinned out about once in four years. When the situation is much exposed, Bush trees are considered the best, restricted to 10 or 12 feet in height, by pruning at midsummer, and again in autumn or early spring.

Manure is given when the trees give indications of requiring a stimulant, by removing the soil until the roots are found, placing a good layer of farmyard dung all over, and returning the soil on the top as before; this is done in the autumn. If any of these Bush trees get unfruitful through growing too vigorously, we take out a trench all round at 4 feet from the stem of the tree, and deep enough to cut off all the principal roots, and in extreme cases we lift the tree, prune the roots, and replant. All our trees are on the Crab stock.

2.—Mr. JOHN GREY, *Normanton Park, Stamford, Rutland.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Keswick Codlin, Lord Suffield, Cellini, Cox's Pomona, Stirling Castle, Ecklinville, Gravenstein, Manks' Codlin, Worcester Pearmain, Peasgood's Nonesuch, Pinder's Apple, Small's Admirable, Golden Spire, Kirke's Fame, Alfriston, Nelson Codlin, New Hawthornden, Dumelow's Seedling, Tower of Glamis, King of the Pippins, Schoolmaster, Ribston Pippin, Annie Elizabeth, Northern Greening.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Lord Suffield, Stirling Castle, Ecklinville, Peasgood's Nonesuch, Pinder's Apple, Kirke's Fame, Alfriston, Small's Admirable, Schoolmaster, Northern Greening, Annie Elizabeth, Dumelow's Seedling.

Exhibitor's Remarks.—Situation: ground inclining to the north, but sheltered on all sides by trees. Soil, old garden; subsoil, red conglomerate.

General Remarks.—Except a few old Standard trees, our apples are all grown as Cordons, Bushes, and Pyramids on the Paradise stock. They are transplanted, and the roots pruned when over vigorous; very little top pruning required. Nurserymen graft the Paradise stock too near the ground. There ought to be sufficient length of stem to prevent the scion rooting into the ground, &c.

STAFFORDSHIRE.

Exhibitor.

- 1.—Mr. Z. STEVENS, *Gardener to the Duke of Sutherland, Trentham, Staffordshire.*

Observations.—Examples of fair average merit.

Exhibitor's Remarks.—The Apples exhibited have all been grown on arched trellises and small Bush trees about 10 years old, grafted on the French Paradise. The trees all bear abundantly. Apples grafted on other stocks, such as the Crab, do not produce good fruit in this locality. We therefore strongly advise growers of Apples in similar districts to Trentham to use the French Paradise stock. The soil here is loamy, on the New Red Sandstone formation. Situation, low but sheltered, and very damp. This is a very poor fruit district.

WARWICKSHIRE.

Exhibitors.

- 1.—Mr. D. BARDEN, *Gardener to the Hon. C. W. Winch, Offchurch, Bury, Leamington.*

Exhibitor's Remarks.—Grown on Espaliers and Standard trees from 25 to 30 years of age. Situation, very damp, close to the River Trent, and often enveloped in fog, well protected to the south and west, but exposed on other sides. Soil, of a light sandy nature; subsoil, gravelly. The trees in the orchard have been much neglected; but I hope by judicious thinning to obtain better fruit.

- 2.—Mr. ALEX. D. CHRISTIE, *Castle Gardens, Warwick.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Kerry Pippin, Keswick Codlin, Fearn's Pippin, Manks' Codlin, Alexander, Ecklinville Seedling, Lord Suffield, Lord Grosvenor,

Cox's Pomona, Cox's Orange Pippin, Ribston Pippin, Blenheim Orange, Stirling Castle, Hawthornden, Beauty of Kent, Warner's King, Nonesuch, Broad Eyed Pippin, Adams' Pearmain, Dumelow's Seedling, King of the Pippins, Bess Pool, Hanwell Souring, Northern Greening.

Exhibitor's Remarks.—Situation, sheltered fairly well all round. Soil, sandy ; subsoil, gravel or sandstone.

General Remarks.—All grown as Standards, Bushes, and Pyramids, on the Crab stock. Root pruned as required. Not confined to spurs in pruning, but leave young wood two or three feet long, according to strength, from which we get the best fruit. All large fruiting sorts, such as Ecklinville, Lord Suffield, and Warner's King, should be grown as Bushes or Pyramids, otherwise the fruit is blown down or damaged before it is fit to be gathered.

Varieties of Apples suitable for Cultivation in Warwickshire.

SELECTED BY MR. D. BARDEN, *Offchurch, Leamington, Warwick.*

Dessert Apples.—King of the Pippins, Ribston Pippin, Wyken or Warwickshire Pippin.

Culinary Apples.—Hanwell Souring, Kentish Fillbasket, London Pippin, Mère de Ménage, Northern Greening.

GROUP V.

WESTERN COUNTIES.

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DEVONSHIRE.

Exhibitors.

- 1.—Mr. J. GARLAND, *Gardener to Sir T. D. Acland, Bart., M.P., Killerton, Exeter.*

Exhibitor's Remarks.—The trees are of all ages ; as old ones fail, young ones are planted to fill up the vacancies. They are all Standards, and grafted on stocks raised from Apple-pips, sown as they come from the cider press. It is the general rule in this county to raise stocks in this way. Situation, exposed to south-west winds. Soil, a red loam on Red Sandstone subsoil. As we have extensive orchards to gather from, very few Apples are grown in the garden. Young, healthy trees are very quickly changed into any new sort, by being headed back moderately short, and 20 or 30 grafts put on them. The trees are periodically pruned, and the heads thinned, to ensure a better bearing throughout the trees ; and they also suffer less from the effects of gales, which are smartly felt here, coming straight off the Dartmoor Hills. The young stocks raised from the pips are locally termed "Gribbles," and are raised chiefly by small market gardeners. The strongest are first selected, and planted back for a year or two, when they are usually bought by the tenant farmers, who plant them out about 3 feet apart, where they remain for one or two years, according to the strength and progress they may have made when they are headed back and grafted. The same season they will make shoots 4 feet or 5 feet long. These are shortened in winter to the required height for Standard trees, and have sufficient room allowed them to make fine healthy heads. Finally, they are transplanted into the orchard, or sold to other farmers, or those who do not raise their own. Tremlett's Bitter is usually grafted on another tree headed down ; being such an enormous bearer, it does not make a good young tree in the ordinary way.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR
CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Dessert.—Irish Peach, Devonshire Quarrenden, King of the Pippins, Cox's Orange Pippin, Blenheim Orange, Adams' Pearmain, Wyken Pippin, Sturmer Pippin.

Culinary.—Keswick Codlin, Lord Suffield, Hawthornden, Tom Putt, Warner's King, Frogmore Prolific, Pott's Seedling, Cox's Pomona, Cellini, Lady Henniker, Winter Hawthornden, Dumelow's Seedling, Betty Geeson, Mère de Ménage, Alfriston, Royal Russet.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Dessert.—Devonshire Quarrenden, King of the Pippins, Cox's Orange Pippin, Blenheim Orange.

Culinary.—Lord Suffield, Hawthornden, Tom Putt, Warner's King, Cox's Pomona, Cellini, Winter Hawthornden, Dumelow's Seedling.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

King of the Pippins, Blenheim Orange, Lord Suffield, Hawthornden, Tom Putt, Warner's King, Cox's Pomona, Cellini, Winter Hawthornden, Dumelow's Seedling. The first six named are generally grown in this locality, the four last named are not so well known. Dumelow's is rapidly growing into favour, some farmers growing them by hundreds, it being one of the most profitable sorts if the produce is not sent to market until March.

2.—Mr. A. ROGERS, *Axminster*.

Observations.—An interesting collection of East Devonshire Apples from the valleys of the Axe and Yarty; mostly unknown, or bearing local names.

Exhibitor's Remarks.—Situation, in the Valley of the Axe, exposed to south-west winds. Soil, alluvium, on blue lias marl beds. A great variety of Apples are grown in this district, the majority being Cider Apples of inferior quality, and unnamed, owing to the practice of buying trees to fill gaps in the orchards at the local market, regardless of any quality except strong growth. Some of these are, after a few years, re-grafted with sorts which flourish in that particular orchard. The Apple most commonly met with is that named "Round Apple." Several distinct Apples are called "Haccombe." Tom Putt is by some called "Red Haccombe."

Much advantage would accrue to the farmers if the small and worthless sorts were replaced by trees bearing larger-sized fruit. At present, when there is an abundant crop, the excess remaining after the necessary cider is made is unsaleable, although there is a main line of railway running through the district. Were the quality better, these would find a ready market in London or Bristol. It is reckoned to take 14 bushels of Apples to make a hogshead of cider, which, in a plentiful year, is not worth more than £1. The labour and interest on value of utensils and machinery may be estimated at 5s., so that it is a question whether cider-making would pay at all. If the Apples cultivated were of marketable sorts, properly picked and packed, the profits would be much greater. At present the fruit is not picked, but allowed to fall, and gathered up into heaps when there is nothing else to do.

3.—MR. CHARLES GOULD SCLATER, *Devon Nurseries, Heavitree Bridge, near Exeter.*

Exhibitor's Remarks.—Situation, very exposed to the winds from Dartmoor; soil of two kinds, viz., one a light sand, the other a red gravel resting on the New Red Sandstone.

General Remarks.—The trees are of all ages; as old ones fail, young ones are planted to fill up. They are all Standards, some of them very old. The trees are pruned and thinned every two or three years as they require it; they are principally worked on "Gribbles." I find the soil of the Red Sandstone formation is better adapted for apples than the sandy soil, the first being much cleaner and of a better colour.

4.—MESSRS. R. T. VEITCH & SONS, *Nurserymen, Exeter.*

Exhibitors' Remarks.—The Cider varieties are mostly grown in orchard, the others in nursery, on small Pyramid trees on the Crab and English Paradise. The trees are frequently lifted, and get little pruning excepting in summer. Situation exposed, facing the north. Soil, a heavy loam, one foot deep; subsoil, clay.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Devonshire Quarrenden, Borovitzky, Keswick Codlin, Lord Suffield, Ecklinville, King of Pippins, Blenheim, Cellini, American Mother, Peasgood's Nonesuch, Cox's Pomona, Warner's King, Reinette de Canada, Beauty of Wilts, Cox's Orange Pippin, Cornish Gilliflower, Ribston Pippin, Dumelow's Seedling, Lane's Prince Albert, Adams' Pearmain, Ashmead's Kernel, Sturmer, Lord Burghley.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Blenheim, Ribston Pippin, Lane's Prince Albert, Keswick Codlin, King of Pippins, Reinette de Canada, Adams' Pearmain, Ecklinville, Cox's Orange, Cox's Pomona, Dumelow's Seedling.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Blenheim, Hollow Core, Warner's King, Dumelow's Seedling. Many orchard trees are now being grafted with these sorts.

Varieties of Apples suitable for Cultivation in Devonshire.

SELECTED (1883) BY

Mr. J. GARLAND, *Killerton, Exeter.*

„ A. P. ROGERS, *Arminster.*

MESSRS. R. T. VEITCH & SONS, *Exeter.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin	3	Golden Reinette	1
Cornish Gilliflower	2	Golden Vining	
Irish Peach		Hubbard's Pearmain	
King of the Pippins		Lemon Pippin	
Margil		Mannington's Pearmain	
Sturmer Pippin		McLean's Favourite	
Ashmead's Kernel	1	Pine Apple Russet	
Autumn Pearmain		Ross Nonpareil	
Blenheim Orange		Ribston Pippin	
Claygate Pearmain		Summer Golden Pippin	
Court of Wick		Winter Russet	
Devonshire Queen			
Golden Ball			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Hawthornden	3	Gravenstein	1
Alfriston	2	John	
Dumelow's Seedling		Lincoln	
Keswick Codlin		Manks' Codlin	
Lord Suffield		No Core	
Warner's King		Peasgood's Nonesuch	
Winter Hawthornden	1	Pomeroy	
Beauty of Kent		Reinette de Canada	
Bedfordshire Foundling		Royal Somerset	
Blenheim Orange		Somerset	
Cellini		Tom Putt	
Ecklinville Seedling		Wellington (Dumelow's Seedling)	
Emperor Alexander			
Golden Ball			

DORSETSHIRE.

Exhibitors.

- 1.—Mr. JOHN POWELL, *Gardener to W. E. Brymer, Esq.,
Ilsington House, Dorchester.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR
CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Cox's Pomona, Emperor Alexander, Mother Apple, Cellini, Royal Pearmain, King of the Pippins, Ribston Pippin, Gloria Mundi, Warner's King, Blenheim Orange, New Hawthornden, Mère de Ménage, Peasgood's Nonesuch, Ecklinville Pippin, Beauty of Kent, Lady Henniker, Tower of Glamis, Bedfordshire Foundling, Prince Albert, Green Pippin, Hoary Morning, Betty Geeson, Striped Beefing, Dumelow's Seedling.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Mother Apple, King of the Pippins, Cox's Orange Pippin, Ribston Pippin, Cornish Aromatic, Old Nonpareil, Blenheim Orange, Bristol Apple, Duke of Devonshire, Melon Apple, Claygate Pearmain, Royal Russet.

Exhibitor's Remarks.—Situation, in walled-in garden, very low and damp. Soil, very light and chalky ; subsoil, chalk.

General Remarks.—Grown as Espaliers, Bushes, and Cordons, on the Paradise stock. Pinched twice in summer. The greater part of our Apple trees are planted in heavier soil than the natural garden, as the trees soon turn yellow, and are subject to canker in the ordinary soil.

- 2.—Mr. WM. GALLOP, *Gardener to H. N. Middleton, Esq.,
Bradford Peverill, Dorchester.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR
CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Oslin, Cellini, Emperor Alexander, Golden Spire, Maltster, King of the Pippins, Golden Winter Pearmain, Forge, Hawthornden, Cobham, Cockle's Pippin, Lemon Pippin, Syke House Russet, Golden Pippin, Alfriston, Winter Peach, Boston Russet, Rosemary Russet, Duke of Devonshire, Northern Spy, Forfar Pippin, Braddick's Nonpareil, Golden Harvey, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Lord Suffield, Ringer, Paradise Pippin, Cellini, Golden Spire, Keswick Codlin, Ecklinville Pippin, Wadhurst Pippin, Hanwell Souring, Rosemary Russet, Duke of Devonshire, Dumelow's Seedling.

Exhibitor's Remarks.—Situation, exposed to north-east and east; sheltered from west and north-west by tall forest trees. Soil, light and very thin, but trenched with the chalk to about 2 feet; subsoil, a bed of solid chalk.

General Remarks.—Apples are mostly grown here on Bush and Pyramid trees, the greater part of which have been planted from 16 to 20 years, with few exceptions, on a piece of ground set apart for an orchard, which is very poor. We have a few Espaliers round the vegetable quarters with a little better soil, which generally crop well. They are principally grafted on the Paradise stock, a few on the Crab. I find the Pommier du Paradis a good stock for this light thin soil, it being surface-rooting. Apples are not much grown in this neighbourhood, it is not a fruit district. The markets about here draw their supplies chiefly from Somerset and from the Channel Isles. There are a few orchards in the valleys, the fruit of which is principally used for making cider. We are situated here something like 200 feet above the bed of the river, and rather exposed to the south-west gales from off the English Channel, which are often very destructive to the fruit crops, and the trees are very subject to be covered with lichens. The Apples in this neighbourhood are very small this year, some varieties being not more than half their average size.

3.—Mr. W. PRAGNELL, *Gardener to J. D. Wingfield Digby, Esq.,
Sherborne Castle, Dorset.*

Observations.—A very fine collection of good fruit.

Exhibitor's Remarks.—Fruit chiefly from the Cordon trained trees, nearly all being grafted on the French Paradise. All are pruned summer and winter. The neighbourhood generally is too exposed for market purposes, but, in sheltered spots, Apples could be cultivated to the farmer's advantage. Situation, in walled garden, well sheltered from the east, but very exposed to the north-west winds. Soil, heavy and retentive, about 2 feet in depth, on limestone subsoil.

General Remarks.—I am greatly in favour of the Cordon training principle. Here we have a small walled-in garden, 70 yards square, laid out in four squares, with three rows of trees

round each, the first being 1 foot from the walk and 1 foot high ; the second, 2 feet behind the front one and 18 inches high ; the third, 2 feet behind the middle one and 2 feet from the ground, which gives the garden a very neat appearance, as may be imagined, when they are in full bloom, as also when in fruit. They withstood the storm of Saturday, April 29, 1882, remarkably well, and gave us a splendid crop ; in fact, we gathered more fruit from them than there was in all the gardens for miles round Sherborne, and we have a grand crop again this year.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Benoni, Duchess of Oldenburg, Lord Suffield, Kerry Pippin, Manks' Codlin, Yellow Ingestrie, Ecklinville, Cox's Pomona, Golden Winter Pearmain (or King of the Pippins), Cox's Orange Pippin, Lady Henniker, Scarlet Nonpareil, Golden Noble, Lemon Pippin, Northern Greening, Claygate Pearmain, Blenheim Pippin, Beston Russet, Lord Burghley, Dutch Mignonne, Dumelow's Seedling, Brickley's Seedling, Alfriston, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Kerry Pippin, Lord Suffield, Ecklinville, Golden Winter Pearmain (or King of the Pippins), Cox's Pomona, Cox's Orange Pippin, Lemon Pippin, Lord Burghley, Dutch Mignonne, Dumelow's Seedling, Alfriston, Sturmer Pippin.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Duchess of Oldenburg, Manks' Codlin, Ecklinville, Cellini, Cox's Pomona, Cox's Orange Pippin, Lady Henniker, Golden Winter Pearmain (or King of the Pippins), Blenheim Pippin, Tom Putt.

GLOUCESTERSHIRE.

Exhibitors.

- 1.—Messrs. J. JEFFERIES & SONS, *Nurserymen, Cirencester.*

Observations.—Examples very large and finely grown.

Exhibitors' Remarks.—The Apples were grown on Standards and Pyramids, on the Crab and Paradise stocks, respectively. Situation, much exposed. Soil, principally stone brash.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Quarrenden, Duchess of Oldenburg, Lord Suffield, Cellini, Stirling Castle, Worcester Pearmain, Warner's King, Grenadier, Pott's Seedling, Kerry Pippin, Peasgood's Nonesuch, Small's Admirable, Cox's Orange Pippin, King of Pippins, Mère de Ménage, Blenheim Pippin, Ribston Pippin, Reinette de Canada, Tower of Glamis, Wellington, Margil, Hanwell Souring, Dutch Mignonne, Wyken Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Duchess of Oldenburg, Lord Suffield, Cellini, Stirling Castle, Worcester Pearmain, Pott's Seedling, Kerry Pippin, Cox's Orange, King of Pippins, Blenheim Pippin, Ribston Pippin, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Very few Apples are grown for market in this district; the following would be profitable: Duchess of Oldenburg, Lord Suffield, Cellini, Stirling Castle, Worcester Pearmain, Pott's Seedling, Cox's Orange Pippin, King of Pippins, Warner's King, Wellington.

2.—Mr. T. SHINGLES, *Gardener to the Earl of Ducie, Tortworth.*

Observations.—A remarkably fine, well-grown lot of fruit.

Exhibitor's Remarks.—Situation, sheltered by plantations of tall trees; soil, a sandy loam resting on the Old Red Sandstone.

General Remarks.—Most of the trees are on the Crab stock, part grown as Bush trees, part as Standards. Bush trees are generally closely pruned, Standards are annually thinned.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Lord Suffield, Keswick Codlin, Manks' Codlin, Ecklinville Seedling, Frogmore Prolific, Kerry Pippin, Cellini, King of Pippins, Cox's Orange Pippin, Stirling Castle, Warner's King, Adams' Pearmain, Dumelow's Seedling, Blenheim Orange, Bess Pool, Tower of Glamis, Golden Noble, Winter Hawthornden, Stone's Apple, Round Winter Nonesuch, Duke of Devonshire, Ashmead's Kernel, Annie Elizabeth.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE
IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Lord Suffield, Ecklinville Seedling, Frogmore Prolific, King of the Pippins, Cox's Orange Pippin, Dumelow's Seedling, Blenheim Orange, Bess Pool, Tower of Glamis, Winter Hawthornden, Stone Apple.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Lord Suffield, Keswick Codlin, King of Pippins, Cox's Orange Pippin, Blenheim Orange, Warner's King, Bess Pool, Tom Putt, Dumelow's Seedling, Stirling Castle. Generally speaking this is not a marketing district.

3.—MESSRS. WHEELER & SONS, *Nurserymen, Gloucester.*

Observations.—A very clear-skinned, well-grown collection.

Exhibitors' Remarks.—Grown on Pyramid and Bush trees from 3 to 5 years of age, grafted on the Paradise stock. Situation, in open quarters in nursery; soil, light; subsoil, gravel. Trees grown in the form of Pyramids or Bushes occupy but a small space in the garden, and at the same time are very productive, and of an attractive appearance. They are worthy of extended cultivation in this form.

List of Varieties of Apples suitable for Cultivation in
Gloucestershire.

SELECTED (1883) BY

MESSRS. J. JEFFERIES & SONS, *Cirencester.*

MR. T. SHINGLES, *Tortworth Court, Gloucester.*

MESSRS. J. C. WHEELER & SONS, *Gloucester.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Ashmead's Kernel . . .	3	Devonshire Quarrenden	1
Cox's Orange Pippin . .		Duke of Devonshire . .	
King of the Pippins . .		Fearn's Pippin . . .	
Margil		Lamb Abbey Pear-	
Ribston Pippin . . .		main	
Court Pendu Plat . . .	2	London Pippin . . .	1
Irish Peach		Old Nonpareil . . .	
Kerry Pippin		Scarlet Nonpareil . .	
Wyken Pippin		Sturmer Pippin . . .	
Adams' Pearmain . . .	1	Wormsley Pippin . . .	
Braddick's Nonpareil . .		Yellow Ingestrie . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange . . .	3	Mère de Ménage . . .	1
Dumelow's Seedling . .		Peasgood's Nonesuch . .	
Lord Suffield . . .		Reinette de Canada . .	
Warner's King . . .		Rymer	
Cellini	2	Stone's Apple . . .	
Ecklinville Seedling . .		Tower of Glamis . .	
Keswick Codlin . . .		Wadhurst Pippin . .	
Stirling Castle . . .		Waltham Abbey	
Annie Elizabeth . . .	1	Seedling	
Brabant Bellefleur . .		Wellington (Dumelow's Seedling) . .	
Golden Noble . . .		Yorkshire Beauty . .	
Hawthornden . . .			
Lord Derby			

HEREFORDSHIRE.

*Exhibitors.*1.—THE CRANSTON NURSERY COMPANY, *Hereford.*

Observations.—A most comprehensive and complete collection, inclusive of the Cider varieties, many of the examples being of large size and very handsome in appearance.

Exhibitors' Remarks.—The finest and best fruits exhibited by us were from young Bush and Pyramid trees, from 6 to 8 years old; but some were taken from ordinary orchard Standards from 15 to 20 years old. Some are grafted on English Paradise, but chiefly on ordinary Crab stock. Situation, rather exposed, with a north aspect. Soil, strong retentive loam, on clay subsoil.

2.—MR. J. HARTLAND, *Canon Frome Court, Ledbury, Hereford.*

Observations.—Examples excellent, and finely coloured.

Exhibitor's Remarks.—The soil here is a very heavy clayey loam. The situation is low and damp, on the River Frome,

barely out of the reach of floods, consequently fruit trees do not thrive. Some varieties, especially the Ribston Pippin, canker badly.

No Apples are specially grown for market in this neighbourhood, but dealers from Birmingham and elsewhere now buy up a quantity of the finest Cider Apples. The varieties are mostly of small size, but any of medium size that will boil well are bought. The only well-known variety grown is Blenheim Orange, and that not largely; it is rather an uncertain bearer, but the fruit always commands a good price. Other varieties are sold at a very low price.

General Remarks.—There is practically no cultivation, the orchards around here being in a sadly neglected state, mostly large standard trees on grass land, grazed by cattle. Little or no pruning is done, and the trees in most cases are densely covered with moss and lichen. Crop very uncertain and irregular.

3.—Mr. T. PARKER, *Moreton Court, Hereford.*

Observations.—Examples very fine.

Exhibitor's Remarks.—These Apples were grown in the Tugg Valley; situation sheltered. Soil, a deep loam, on a sandstone rock. The variety named Tyler's Kernel was, I believe, sent here from the neighbourhood of Ledbury. It has been bearing some splendid fruit for the past two years; the tree is a strong grower, and the fruit keeps well till April.

4.—Mr. W. STYLES, *The Gardens, Brampton, Bryan Hall, Hereford.*

Exhibitor's Remarks.—All grown on old Standards. Situation, sheltered. Soil, very light; subsoil, gravel. Our Apples are always small.

Varieties of Apples suitable for Cultivation in Herefordshire.

SELECTED (1888) BY

THE CRANSTON NURSERY COMPANY, *King's Acre, Hereford.*

Mr. T. PARKER, *Moreton Court, Hereford.*

„ W. STYLES, *Brampton, Bryan Hall, Hereford.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Adams' Pearmain . . .	2	Early Nonpareil . . .	1
Court Pendu Plat . . .		Fearn's Pippin . . .	
Crimson Queening . . .		Golden Pippin . . .	
King of the Pippins . . .		Hughes' Nonpareil . . .	
Old Nonpareil		Oslin	
Ribston Pippin	1	Red Juneating	
Blenheim Orange		Red Streak	
Brownlee's Russet		Royal Pearmain	
Cockle's Pippin		Royal Russet	
Devonshire Quarrenden		Scarlet Nonpareil	
Downton Nonpareil		Syke House Russet	
Downton Pippin		Yellow Ingestrie	
Early Harvest			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange	3	Lord Derby	1
Warner's King		Lord Grosvenor	
Catshead	2	Lord Suffield	
Dumelow's Seedling		Northern Greening	
Tom Putt		Old Hawthornden	
Winter Greening	1	Parker's Greening	
Bess Pool		Red Hawthornden	
Duchess of Oldenburg		Ringer	
Ecklinville Seedling		Stirling Castle	
Golden Noble		Tyler's Kernel	
Hawthornden, New		Tower of Glamis	
Herefordshire Beefing			

MONMOUTHSHIRE.*Exhibitors.*

1.—Mr. THOMAS COOMBER, *The Hendre Gardens, Monmouth.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Red Astrachan, Lady Sudeley, Lord Suffield, Keswick Codlin, Golden Noble, Stirling Castle, Hawthornden, Cellini, Cox's Pomona, Warner's King, Ecklinville Seedling, Emperor Alexander, Mère de Ménage, Blenheim Pippin, Cox's Orange Pippin, King of the Pippins, Dumelow's Seedling, Mannington's Pearmain, Northern Greening, Reinette de Canada, Court Pendu Plat, Scarlet Nonpareil, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Lord Suffield, Stirling Castle, Hawthornden, Cellini, Warner's King, Mère de Ménage, Blenheim Pippin, Cox's Orange Pippin, King of Pippins, Court Pendu Plat, Sturmer Pippin.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Irish Peach, Lord Suffield, Hawthornden, Cellini, Warner's King, Blenheim Pippin, King of the Pippins, Cox's Orange Pippin, Golden Noble, Mère de Ménage.

Exhibitor's Remarks.—There are but few Apples grown for market in this district. Situation moderately sheltered. Soil, cold clayey loam ; subsoil, marl.

General Remarks.—The Apples exhibited were mostly grown upon Standard trees 20 and more years old, in an orchard which is moderately sheltered from the north and west, otherwise exposed. Very little manure is afforded other than that derived from sheep or calves when grazing the grass. The stock employed is the ordinary Crab, upon which growth is freely made. In pruning, all dead wood is removed, and superfluous growths are cut away. In this neighbourhood much cider fruit is cultivated, whilst dessert varieties are neglected. The trees in many orchards are old, and young ones are not planted to the extent they ought to be.

2.—Mr. W. JENKINS, *The Willows, Abergavenny.*

Observations.—Remarkable for the high colouring of all the specimens.

Exhibitor's Remarks.—Fruit gathered from trees of various ages, some of them 70 years old, and grafted on the Crab ; some

of the younger trees being on the French Paradise. Situation of garden, sheltered from the north, with south aspect. Soil, a light loam, with a subsoil of Old Red Sandstone formation.

Varieties of Apples suitable for Cultivation in Monmouthshire.

SELECTED BY MR. W. JENKINS, *Abergavenny*.

Dessert.—Court Pendu Plat, Devonshire Quarrenden, Fearn's Pippin, Guernsey Pippin, Irish Peach, King of the Pippins, Monmouthshire Beauty, Pearmain, Pitmaston Pine Apple, Reinette de Canada, Scarlet Nonpareil, Worcester Pearmain.

Culinary.—Blenheim Orange, Cellini, Dumelow's Seedling, Emperor Alexander, Lord Suffield, London Codlin, Monmouthshire Beauty, New Hawthornden, Warner's King, Western Seedling, Yorkshire Beauty.

SHROPSHIRE.

Exhibitors.

1.—MR. RICHARD MILNER, *Sundorne Gardens, Shrewsbury*.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Blenheim Pippin, Claygate Pearmain, Cornish Gilliflower, Fearn's Pippin, Cox's Orange Pippin, King of the Pippins, Ribston Pippin, Lord Burghley, Margil, Irish Peach, Sam Young, Pearson's Plate, Lord Suffield, Hawthornden, Stirling Castle, Dumelow's Seedling, Mère de Ménage, Waltham Abbey Seedling, Emperor Alexander, Cellini, Golden Noble, Manks' Codlin, Kentish Fillbasket, Beauty of Kent.

Situation, sheltered from the north, east, and west winds. Soil, heavy; subsoil, clay.

2.—MR. A. S. KEMP, *Gardener to P. J. Brooke, Esq., Haughton, Shifnal, Shropshire*.

Observations.—Fruit small, and deficient in colour.

Exhibitor's Remarks.—We grow our trees in a great variety of forms, Standard, Bush, Pyramid, Espalier, Cordon, &c.; the average age would be about 30 years, many being much older. Situation of orchard, partially shaded by tall trees from the afternoon sun, hence the deficiency in the colour of the fruit. Soil, a good strong loam, upon gravelly subsoil.

Varieties of Apples suitable for Cultivation in Shropshire.

SELECTED BY MR. A. S. KEMP, *Shifnal*.

Dessert.—Aromatic Russet, Blenheim Orange, Cox's Orange Pippin, Cornish Gilliflower, Herefordshire Pearmain, King of the Pippins, Red Astrachan, Ribston Pippin, Royal Russet, Whorle Pippin, Wyken Pippin, Yellow Ingestrie.

Culinary.—Bess Pool, Blenheim Orange, Cox's Pomona, Dumelow's Seedling, Ecklinville Seedling, Greenup's Pippin, Hawthornden, Keswick Codlin, Lord Suffield, Manks' Codlin, Norfolk Bearer, Norfolk Stone Pippin, Tower of Glamis, Waltham Abbey Seedling.

SOMERSETSHIRE.

Exhibitors.

1.—MR. R. H. POYNTER, *Nurseryman, Taunton*.

Observations.—A remarkably fine and most interesting collection, many of the examples being large and very highly coloured.

Exhibitor's Remarks.—Grown mostly on old Standard trees, in the orchards in this district. Situation, generally exposed. The greater portion of the Apples are here grafted on what is called "The Morgan Sweet" Apple, which is, when young, a very strong grower, and makes a fine young market tree; our Apple-tree nurserymen growing the grandest trees for sale in England, and chiefly of this variety, Morgan Sweet. Trees are offered of all sorts, but the farmer generally finds he has to re-graft if he wants a good kind. The Seedling Apple stocks are grown on good but thin soil, on a gravel sub-soil, heavily mulched with rotted gorse and fern, and carefully attended to for about 4 or 5 years from first grafting. The marketable tree is, in roots and tops, as near perfection as is attainable, having a nice clean trained head, a straight, smooth stem, and fine spreading fibrous roots. This is, no doubt, a fine district for Apple growing, and there are numberless very fine old orchards; but there are no growers so-called, and when the farmers renew old trees, it is almost "Hobson's choice," viz., Morgan Sweet; as from 25 years' experience here, I have rarely heard of "wildings," i.e. Apples raised from the pips, being specially grown and prepared for orchard renewals; but which, I believe, is the custom for Cider orchards in Worcester, Gloucester, &c. Devonshire follows suit with us. I believe there has been less inquiry for named best sorts of Apples hereabouts than in any other district in England.

2.—Mr. J. SCOTT, *Crewkerne Nurseries, Somerset.*

Observations.—Examples very small.

Exhibitor's Remarks.—All gathered from small Bush trees (with the exception of the Cider kinds) from 3 to 5 years old, mostly grafted on the Crab stock; a few from trees grafted on Scott's Pommier du Paradis. Situation, exposed, with not the slightest shelter, and open to north and east winds. Soil, very sandy and easily worked; subsoil, to the depth of 20 to 30 feet, a yellow sand.

Varieties of Apples suitable for Cultivation in Somersetshire.

SELECTED (1883) BY

Mr. R. H. POYNTER, *The Nursery, Taunton.*

„ J. SCOTT, *Merriott, Crewkerne.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange . . .	2	Golden Ducat . . .	1
Cox's Orange Pippin . .		Golden Winter Pear-	
King of the Pippins . .		main	
Nonpareil		Irish Peach	
Ribston Pippin	1	London Pippin . . .	
Ashmead's Kernel . . .		Mannington's Pear-	
Cellini		main	
Court of Wick		Powell's Russet . .	
Fry's Pippin		Tom Putt	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange . . .	2	Golden Noble	1
Hawthornden		Lord Derby	
Keswick Codlin		Lord Suffield	
Alfriston		Manks' Codlin	
Cellini	1	New Hawthornden . .	
Duke of Wellington		Pott's Seedling . . .	
(Dumelow's Seedling)		Roundway Magnum	
Flanders Pippin . . .		Bonum	
Frogmore Prolific . . .		Tom Putt	

WORCESTERSHIRE.

*Exhibitors.*1.—Mr. E. COCKBILL, *Wick House, Pershore.*

Observations.—Examples large, and remarkable for high colouring.

Exhibitor's Remarks.—Grown on Standard trees, grafted high, so as to be out of the reach of cattle ; chiefly on very old stocks. Situation, exposed, slightly inclining to the north. Soil, a sandy loam resting on gravel.

2.—Mr. WILLIAM CRUMP, *Madresfield Court, Malvern.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Culinary.—Lord Suffield, Stirling Castle, Cellini Pippin, Peasgood's Nonesuch, Lord Derby, New Hawthornden, Pott's Seedling, Warner's King, Lane's Prince Albert, Flanders Pippin, Dumelow's Seedling, Newland Sack.

Dessert.—Worcester Pearmain, Strawberry Pippin, King of Pippins, Cox's Orange Pippin, Ribston Pippin, Blenheim Pippin, Golden Reinette, Adams' Pearmain, Carraway Russet, Brownlee's Russet, Sturmer Pippin, May Queen.

Exhibitor's Remarks.—Situation, exposed, 135 feet above sea-level. Soil, heavy, strong, approaching to clay.

General Remarks.—All from Free or Crab stocks, which are frequently lifted. About 160 kinds are grown ; many of the samples are from Orchard-grown trees on grass, a few kinds from Bush and Pyramid trees.

3.—Mr. J. HIAM, *Astwood Bank, Redditch, Worcestershire.*

Exhibitor's Remarks.—The Apples are from various forms of trees, chiefly of the Crab stock. Situation, mostly exposed. Soil, variable, chiefly a light sandy loam, in part on a tenacious red clay subsoil.

4.—Messrs. RICHARD, SMITH, & Co., *Nurserymen, Worcester.*

Exhibitors' Remarks.—Grown on Standard trees on the Apple stock. Situation, exposed. Soil, a sandy loam ; subsoil, red sand and gravel. The majority of the orchards in this county—and it is hardly necessary to say there are very many—are out of date. Smith's Pippin we think very highly of. It is a wonderful keeper, and its flavour in tarts is exquisite. The tree is a sure and abundant bearer.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Devonshire Quarrenden, Worcester Pearmain, Irish Peach, Yellow Ingestrie, Lord Suffield, Keswick Codlin, Ecklinville Seedling, Cellini, Cox's Pomona, Emperor Alexander, Golden Winter Pearmain, Golden Noble, Yorkshire Beauty, Beauty of Kent, Lane's Prince Albert, Cox's Orange Pippin, Ribston Pippin, Ashmead's Kernel Improved, Adams' Pearmain, Blenheim Orange, Dumelow's Seedling, Warner's King, Annie Elizabeth, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Devonshire Quarrenden, Worcester Pearmain, Irish Peach, Keswick Codlin, Ecklinville, Cellini, Cox's Orange Pippin, Golden Winter Pearmain, Golden Noble, Dumelow's Seedling, Warner's King, Annie Elizabeth.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Worcester Pearmain, Keswick Codlin, Lord Suffield, Warner's King, Ecklinville Seedling, Worcester Fillbasket, Emperor Alexander, Dumelow's Seedling, Golden Winter Pearmain, Cox's Orange Pippin.

5.—THOMAS SOUTHALL, *South Bank, Worcester.*

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Baxter's Favourite, Blenheim Orange, Cox's Orange Pippin, Emperor Alexander, Forfar Pippin, Forge, Golden Winter Pearmain, Tom Putt, Worcester Pearmain, Court Pendu Plat, Dumelow's Seedling, Keddleston Pippin, Rushock Pearmain, Winter Peach, Winter Quoining, Gravenstein, Hawthornden, Maltster, May Queen, Prince's Pippin, Pitmaston Russet, Cellini, Stirling Castle.

Exhibitor's Remarks.—Situation, rather sheltered. Soil, good loam, with a subsoil of marl.

General Remarks.—All grown on Standards in orchard used as kitchen garden. Planted about 23 years ago, and pruned occasionally.

List of Varieties of Apples suitable for Cultivation in Worcestershire.

SELECTED (1888) BY

MESSRS. R. SMITH & Co., *Worcester.*

Mr. E. COCKBILL, *Pershore.*

„ J. HAM, *Astwood Bank, Redditch.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	2	King of the Pippins .	1
Devonshire Quarrenden		Mannington's Pear-	
Irish Peach		main	
Kerry Pippin		Margil	
Red Astrachan		Prince's Pippin . . .	
Ribston Pippin		Scarlet Pearmain . . .	
Worcester Pearmain .	1	Sturmer Pippin . . .	
Blenheim Orange . . .		White Transparent . .	
Duke of Devonshire .		Woodhill (Local) . . .	
Early Strawberry . . .		Wyken Pippin	
Golden Nonpareil . . .		Yorkshire Beauty . . .	
Golden Winter Pear-			
main			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange . . .	3	Gloria Mundi	1
Keswick Codlin		Hanwell Souring . . .	
Lord Suffield		Nelson's Glory	
Dumelow's Seedling . .	2	(Warner's King) . . .	
Golden Noble		Normanton Wonder . .	
Stirling Castle		Peasgood's Nonesuch .	
Beauty of Kent	1	Red Hawthornden . . .	
Cobham		Tom Putt	
Ecklinville Seedling . .		Tower of Glamis . . .	
Forester		Warner's King	
Golden Spire		White Hawthornden . .	

GROUP VI.

NORTHERN COUNTIES.

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DURHAM.*Exhibitor.*

1.—Mr. F. C. FORD, *Durham Gardeners' Institute, Darlington.*

Exhibitor's Remarks.—Grown in garden—part of which lies rather low—exposed to south and west, but sheltered on other sides. Soil, a heavy clay, in some parts not more than 6 inches deep. This has been much improved by trenching, and the application of liberal dressings of lime and farmyard manure; the subsoil is a very heavy blue and yellow clay, with stones.

Varieties of Apples suitable for Cultivation in Durham.

SELECTED BY MR. F. C. FORD, *Gardeners' Institute, Darlington.*

Dessert Apples.—Adams' Pearmain, Blenheim Orange, Cox's Orange Pippin, Fearn's Pippin, Golden Pippin, Golden Winter Pearmain, Irish Peach, Kerry Pippin, King of the Pippins, Red Astrachan, Ribston Pippin, Warner's Pippin.

Culinary Apples.—Bedfordshire Foundling, Cellini, Dume-low's Seedling, Ecklinville Seedling, Emperor Alexander, George the Fourth, Hawthornden, Lord Grosvenor, Lord Suffield, Melon, Pott's Seedling, Warner's King.

LANCASHIRE.*Exhibitors.*

1.—Mr. J. HATHAWAY, *Lathom House Gardens, Ormskirk.*

Exhibitor's Remarks.—Most of the trees here are about 30 years old, of Bush shape, on the Crab stock. A few planted since are Standards on the Paradise. Situation, low and damp, well sheltered by belt of forest trees, and shaded on the south-east. Soil, poor, black, and very sandy, about 18 inches deep; subsoil, a strong yellow and very adhesive clay. I consider King of the Pippins the best all-round Apple for this district, as it scarcely ever misses cropping. I think trees do better here on the Crab than on any other stock.

2.—Mr. R. MARIES, *Mythop Nurseries, Lytham, Lancashire.*

Exhibitor's Remarks.—Apples mostly grown on Standard trees, about 14 years old. Situation, open, half a mile from the

sea. Soil, a light sandy loam. The varieties I have named I consider the best dessert and culinary kinds for this neighbourhood. Bitter Sweet, so called from having the rind slightly bitter, is a good eating Apple; and Royal Shepherd is one of the best late kitchen I have or know.

3.—Mr. W. P. ROBERTS, *The Gardens, Cuerden Hall, Preston.*

Observations.—Fruit small and deficient in colour.

Exhibitor's Remarks.—Our trees are all Bush or Dwarf Standard, and are mostly old. Situation, well sheltered. Soil, a sandy and rather wet clay, which is aggravated by the absence of surface drains for the walks, the water percolating into the ground where not wanted. The soil round our Apple trees had been dug one spade in depth and no more, and cropped up to their stems until three years ago; since then, the ground has been trenched 2 feet deep, or dug, as required, to within 5 or 6 feet of their stems, and the other part simply hoed. I believe that the trees have benefited by this. Trenching allows the water to pass through more freely, and conducts it so much further away from the surface.

Varieties of Apples suitable for Cultivation in Lancashire.

SELECTED (1883) BY

Mr. J. HATHAWAY, *Lathom House, Ormskirk.*

„ R. MARIES, *Nurseryman, Lytham.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins . . .	3	Juneating	1
Early Margaret . . .	2	Lady Derby	
Alms House Pippin . . .	1	Lemon Pippin	
Bitter Sweet		Lord Lennox	
Blenheim Orange . . .		Manks' Codlin	
Claygate Pearmain . . .		Mannington's Pearmain . . .	
Court of Wick		Ribston Pippin	
Court Pendu Plat . . .		Sturmer Pippin	
Cox's Orange Pippin . . .		Winter Calville	
Golden Drop		Yellow Ingestrie	
Irish Peach			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield	3	Grenadier	1
Keswick Codlin . . .	2	Hawthornden . . .	
Livesey's Scotch		Lord Derby . . .	
Bridget		Louis I. . . .	
Manks' Codlin . . .		New Hawthornden .	
Pott's Seedling . . .		Norfolk Bearer . .	
Warner's King . . .	1	Ringer	
Cellini		Royal Shepherd . .	
Court Pendu Plat . .		Ryland Surprise . .	
Cox's Pomona . . .		Tower of Glamis . .	
Emperor Alexander .		White Calville (Scotch	
Golden Noble . . .		Bridget)	

WESTMORELAND.

Exhibitor.

- 1.—Mr. CHARLES CROSSLAND, *Gardener, Beachwood, Arnside, Westmoreland.*

Observations.—An extremely interesting collection of old English Apples now seldom to be met with. The examples were all small, very deficient in colouring, being green and unripe looking, and all more or less acid.

Exhibitor's Remarks.—Grown on old Standard trees, planted in the year 1776, and grafted on the Crab stock. Situation, on the seashore, with a north aspect, very much exposed, suffering much from west winds, and receiving no sun before midday. Soil, 12 inches of moderate loam; subsoil, a reddish clay, wet and poor. The orchard at Beachwood does not at present show a great amount of culture. It had been allowed to run almost wild until a few years ago. The Apples I have sent may not be as fine as might be anticipated, but as they are gathered from such old trees, much finer could not be expected. The Apples named are varieties I should select if I were going to plant a new orchard, provided they were all worked on the Crab stock. I consider the Crab stock the only one fit for this locality, as several varieties on other stocks canker very much here. The same varieties have been grown on the Beachwood estate for over 200 years, and yielded some remarkably heavy crops and fine fruit when cultivated by a Mr. Saul, a great lover of orchard culture, and a former owner of Beachwood. Mr. Saul always used the Crab stock.

Varieties of Apples suitable for Cultivation in Westmoreland.

SELECTED BY MR. C. CROSSLAND, *Beachwood, Arnside.*

Dessert Apples.—Court Pendu Plat, Cox's Orange Pippin, Irish Peach, Kerry Pippin, King of the Pippins, Margil, Newtown Pippin, Red Astrachan, Ribston Pippin, Scarlet Nonpareil, Sturmer Pippin, Syke House Russet.

Culinary Apples.—Bedfordshire Foundling, Keswick Codlin, King Apple, Lord Suffield, Nelson's Glory (Warner's King), Normanton Wonder (Dumelow's Seedling), Northern Greening, Northern Spy, Prussian Pippin, Ringer, Royal Russet, Scotch Bridget.

YORKSHIRE.

Exhibitors.

- 1.—Mr. J. BOURNE, *Priory Gardens, Longhill, Guisborough.*

Observations.—Examples small and deficient in colour.

Exhibitor's Remarks.—Grown on Standard and Bush trees, some of them being very old. Situation, rather sheltered. Soil, a sandy loam; subsoil, gravel. Our garden is situated near the town of Guisborough. It is a very old garden, on some parts of which stood the Guisborough Priory. The Cockpit does very well here; also Lord Suffield and Keswick Codlin. Really good-flavoured Desert Apples are very difficult to obtain in the open.

- 2.—Mr. W. CHUCK, *The Gardens, Brodsworth Hall, Doncaster, Yorks.*

Observations.—Fruit small and deficient in colouring.

Exhibitor's Remarks.—Most of the trees are 27 years old, being nearly all Bush or Pyramid, chiefly grafted on the Paradise stock. Some of the varieties are very free bearers, but subject to canker. Situation, in a valley running east and west, subject to very sweeping gusty winds. Soil, calcareous, resting upon magnesian limestone. The trees are subject very much in dry seasons to red spider attacks. We have many good varieties in our collection of 100; Peasgood's Nonesuch was very good last year, but our trees being young they bore no fruit this season. Northern Spy is now beginning to bear freely, having hitherto been shy; it keeps well. Some of our trees are cankering badly;

Ribston Pippin, Alfriston, St. Sauveur, Lord Burghley, Pearson's Plate, Hawthornden, and Lord Suffield being about the worst in that respect.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Dessert.—Red Astrachan, Devonshire Quarrenden, King of the Pippins, Blenheim Orange, Cox's Orange Pippin, Ribston Pippin, Mannington's Pearmain, Reinette de Canada, Fearn's Pippin, Scarlet Nonpareil, Duke of Devonshire, Sturmer Pippin.

Kitchen.—Lord Suffield, Ecklinville Pippin, Stirling Castle, Keswick Codlin, Cox's Pomona, Peasgood's Nonesuch, Mère de Ménage, Nonesuch, Tower of Glamis, Alfriston, Northern Greening, Dumelow's Seedling.

3.—Mr. H. J. CLAYTON, *The Gardens, Grimston Park, Tadcaster, Yorks.*

Exhibitor's Remarks.—Grown mostly on Standard and dwarf Bush-shaped trees, slightly pruned, and not hard spurred in. Taking all points into consideration, we consider this form the best, both for private use and market. The best fruit is obtained from young trees 10 to 12 years old. The trees are all on the Crab stock. Situation, sheltered from north and east. We find that if it be fully exposed to the south-west much fruit is lost by the winds. Soil, one part good and loamy, resting on magnesian limestone, the other on alluvial soil; subsoil, sandy, in some cases a deep warpy loam, just above the water mark of periodical flooding of the River Wharf. Grown in the latter condition the fruit is generally very fine for the north. I have known 40 stones of fruit picked from a tree of so-called Red Balsam, or Scarlet Cockpit. To-day, October 12, we have picked 35 stones from a Standard tree of Lewis's Incomparable. There is a good deal of fruit grown hereabouts considering the latitude. I have been trying to induce those most interested to plant more Apples for some years past. Standards are the most liked, because the ground beneath can be cropped or laid down in grass, the cattle not damaging the trees to any extent. For my own part I prefer Bush-shaped trees, if the fruit alone is to be considered, because of the ease in gathering the fruit, and because the trees are ready of access, they can be more regularly pruned, and will consequently produce finer fruit—an important advantage. Further, there would not be such heavy losses by winds in the autumn. For choice dessert Apples I do not think there is a more profitable way to grow them than by Espaliers. Pyramidal-shaped trees we do not care much about, unless the natural habit of the tree causes it to grow in that

form. I ought to mention that we are here much more favourably situated than others in many other parts of Yorkshire as to altitude, being about 100 feet above the sea-level.

4.—Mr. J. McINDOE, *Gardener to Sir Joseph Pease, Bart., M.P., Hutton Hall, Guisborough.*

Exhibitor's Remarks.—Grown on Standard trees about 10 years old, grafted on the Crab stock. Hutton Hall Gardens are comparatively new. The situation is seven miles inland, 400 feet above sea-level, and we have no old timber in the park. The gardens are much exposed to gales off the North Sea. The average rainfall is 39 inches per annum. The soil may be described as argillaceous, pure and simple; the subsoil consists of hard blue and yellow clay. By draining, trenching, limeing, manuring, and adding large quantities of sea sand, it has been much improved, and now grows excellent vegetables as well as Apple trees. The cold and sunless weather we had during July and the last four weeks will account for the want of colour in the fruit.

5.—Messrs. J. SLATER & SONS, *Malton, North Yorkshire.*

Observations.—An interesting representative collection of the most approved Apples of North Yorkshire. Explanatory tickets were attached stating the nature of the soil in which grown, habit and growth of trees, bearing properties, &c.

Exhibitors' Remarks.—All fruit from open Standards, many of them from old trees, grafted on the Crab, mostly grown in the valleys of Derwent and Rye, and partially sheltered. Soil, a rich alluvial loam and clay on the Kimmeridge clay, lying between oolite ranges of hill and chalk. The Cockpit and Keswick Codlin are the most universally grown as culinary Apples in the district; both are very hardy, bear abundantly, and thrive in almost all situations. Lord Suffield requires shelter, likewise Alexander, but in good situations both are fine, early kinds. Ecklinville is one of recent introduction in the district, is very hardy, and likely to prove a useful variety for early autumn. For dessert sorts the Ribston Pippin requires a well-drained soil. Golden Reinette bears abundantly, and is a hardy and vigorous tree. Blenheim Orange is much grown; the tree is a very vigorous grower, but only a moderate bearer, and the quality of the fruit varies much according to its situation. Golden Russet is a good hardy sort, and bears well. Adams' Pearmain is a very abundant bearer, of moderate growth. The rich alluvial valley of Ryedale is well adapted for Apples; orchards are numerous, and have produced much fine fruit. Many of the trees are now getting old, and should be renewed with young ones.

6.—MR. G. SUMMERS, *Sandbeck Park, Rotherham.*

Exhibitor's Remarks.—The soil here is heavy, on the magnesian limestone. Cockpit is a useful Apple, being very much grown in the old orchards in this county, but inferior to many of the new varieties. Ecklinville Seedling promises to be one of the best Kitchen Apples grown in this locality. Sturmer Pippin is one of our best dessert. King of the Pippins is one of the best croppers; we have not failed to obtain a crop for the past six years. Warner's King I consider to be one of the hardiest and best Kitchen Apples grown here. Emperor Alexander is also good.

Varieties of Apples suitable for Cultivation in Yorkshire.

SELECTED (1883) BY

MR. J. BOURNE, *Longhill, Guisborough.*
 „ W. CHUCK, *Brodsworth, Doncaster.*
 „ H. J. CLAYTON, *Grimston, Tadcaster.*
 „ MCINDOE, *Hutton Hall, Guisborough.*
 „ SLATER & SONS, *Malton.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	5	Fearn's Pippin . . .	1
Blenheim Orange . .	3	Golden Russet . . .	
Devonshire Quarrenden		Golden Reinette . .	
Kerry Pippin . . .		Green Balsam (or	
King of the Pippins .		French Crab) . .	
Ribston Pippin . . .		Mannington's Pear-	
Claygate Pearmain .	2	main	
Early Margaret . . .		Margil	
Irish Peach		Red Astrachan . .	
Adams' Pearmain . .		Scarlet Nonpareil .	
Beauty of Hants . .	1	Stamford Pippin . .	
Charlestown Pippin .		Summer Rose . . .	
Cockle's Pippin . . .		Syke House Russet .	
Duke of Devonshire .		Warner's King . . .	
Emperor Napoleon .		Worcester Pearmain	
Eve (Trumpington) .		Yellow Ingestrie . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Keswick Codlin . . . }	4	Beauty of Kent . . . }	1
Lord Suffield . . . }		Blenheim Pippin . . . }	
Cockpit }		Galloway Pippin . . . }	
Dumelow's Seedling . . }	3	Green Balsam }	
New Hawthornden . . . }		Hambledon Deux Ans . . }	
Stirling Castle }		Lewis's Incomparable . . }	
Warner's King }	2	Manks' Codlin }	
Alfriston }		New Large Cockpit . . . }	
Cellini }		Northern Greening . . . }	
Cox's Pomona }		Ringer }	
Ecklinville Seedling . . }		Tower of Glamis }	
Emperor Alexander . . }		Winter Hawthornden . . }	
Greenup's Pippin . . . }		Winter Strawberry . . . }	
Nancy Jackson (or Bess Pool) }		Yorkshire Greening . . }	

GROUP VII.

SCOTLAND—SOUTHERN DIVISION,

INCLUDING

EAST LOTHIAN, LANARKSHIRE, MIDLOTHIAN,

PEEBLESSHIRE, ROXBURGHSHIRE, AND WIGTONSHIRE.

SCOTLAND—SOUTHERN DIVISION.

*Exhibitors.*1.—MR. P. BRAND, *Glaisnock, Old Cumnock.*

Observations.—Examples small and green.

Exhibitor's Remarks.—Grown on dwarf Standards, the trees being about 12 years old, grafted on the Crab. Situation, sheltered. Soil, heavy and retentive; subsoil, brick-earth. This is anything but an Apple district, being too cold and bleak, and at an altitude of 600 feet. Our best bearers are Lord Suffield, Keswick, and Manks' Codlin.

2.—MR. R. P. BROTHERSTON, *Tynninghame Gardens, Prestonkirk.*

Observations.—A very interesting and representative collection of Apples, some of the examples being large and fine.

Exhibitor's Remarks.—Grown on Bush trees, having the centre open, from 10 to 30 years old, and mostly grafted on the Crab. Situation, in kitchen garden, sheltered by trees on the north-west and east. Soil, naturally light, but enriched and deepened through long cultivation; subsoil, gravel.

3.—MR. J. BRUNTON, *Gilmerton Gardens, Drem, East Lothian.*

Observations.—A remarkably well-grown collection, many of the examples vying in size and excellence with those grown in the county of Kent. A carefully prepared tabulated list of the varieties sent accompanied this collection, denoting the form and habit of tree, bearing properties, stock, soil on which grown, &c., which added greatly to the interest and value.

Exhibitor's Remarks.—All the varieties grown in the gardens at Gilmerton are grafted on the Paradise stock. Situation, well-sheltered, with a southern exposure. Soil, good and heavy, depth 3 feet; subsoil of clay 6 inches, then gravel.

4.—MR. JAMES DAY, *The Gardens, Galloway House, Garlieston, Wigtonshire.*

Exhibitor's Remarks.—Grown on Bush trees generally, planted about 6 years, and believed to be on the Paradise stock. Situation, within garden walls, low, damp, and sheltered. Soil, a clayey loam, on gravel or rock. The Galloway Pippin I consider the most reliable of any, being a constant cropper and good keeper; the fruit is of good size, and suitable for either culinary purposes or late dessert. The original tree was standing until a few years back in the grounds or orchard attached to an old monastery at Wigtown (near here), but is now removed.

5.—MR. M. DUNN, *The Palace Gardens, Dalkeith, Midlothian.*

Observations.—One of the most complete representative collections submitted; examples small, and, by comparison with those grown in more southern and warmer localities, very green and wanting in colour, and much more acid in flavour. A very carefully prepared list of the entire collection was submitted by Mr. Dunn, giving the names, space for name as corrected by Committee, age of tree, use, season, and quality, &c. Example:—“90.—Macdonald’s Apple, 70 years, K., free bearer, Decr., raised at Dalkeith 70 years ago;” such information being of the greatest importance and value.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Keswick Codlin, Devonshire Quarrenden, Oslin, Lord Suffield, Ecklinville, Thorle, Hawthornden, Worcester Pearmain, Stirling Castle, Kerry Pippin, Tower of Glamis, King of the Pippins, Warner’s King, Cox’s Orange, Golden Noble, Ribston, Blenheim, Yorkshire Greening, Court of Wick, Alfriston, Wellington, Duke of Devonshire, Northern Greening.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Irish Peach, Lord Suffield, Worcestershire Pearmain, Ecklinville, Kerry Pippin, Stirling Castle, King of the Pippins, Warner’s King, Cox’s Orange Pippin, Blenheim Pippin, Court of Wick, Wellington.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Commonest Varieties—Keswick Codlin, Hawthornden, Lord Suffield, Manks’ Codlin, Ecklinville, Cellini, Stirling Castle. Less Common—King of the Pippins, Tower of Glamis, Aitkin’s Seedling.

General Remarks.—The cultivation has been much improved in this district within recent years, and a greater interest is being taken in it by both private and market gardeners. The best varieties of Apples are in good demand, and everyone is anxious to adopt the best possible means to grow them to the greatest perfection. The Free stock is generally found the best for the soil and climate, but in cold situations the Crab is the hardiest and most productive. In kitchen gardens, and by amateurs, Apples on the Paradise stock are commonly grown, and, with

good management and high cultivation, they usually produce good crops of fine fruit, although when neglected and starved they quickly get barren and worthless. In all well-managed gardens and orchards a regular system of annual pruning is followed, and with all Wall, Bush, and Pyramid trees in gardens summer pinching of the young shoots is generally practised, although it is not always done at the proper time and in the systematic manner which is necessary to produce the best results. Mulching of the roots of Dwarf trees on the Paradise stock is highly beneficial, and the application of liquid manure at proper times helps much to produce the finest fruit. Cordons are grown on a limited scale, and are useful in small gardens where variety and a few fine fruit are the chief objects. Protection of the blossom of Apples in spring from late frosts is seldom practised, but with Wall trees and low Bush trees on the Paradise stock it is an advantage in cold springs. For market, the largest varieties of Apples, such as Ecklinville, Lord Suffield, and Warner's King, find a ready sale at remunerative prices, and such varieties are now taking the place of many of the old, small favourites.

6.—J. G. C. HAMILTON, Esq., M.P., *Dalzell, Motherwell, Clydesdale.* Mr. W. KING, *Gardener.*

Observations.—A very interesting contribution of the Apples of Clydesdale, many of the varieties being unknown to the Committee. Examples small in comparison with those grown in the south, very green, deficient in colour, and more acid in flavour.

Exhibitor's Remarks.—Grown principally on old Standard trees, planted 1823. Situation, south aspect, well sheltered. Soil, clay; subsoil, stiff clay.

8.—Messrs. ORMISTON & RENWICK, *The Tub Nurseries, Melrose.*

Observations.—An extremely interesting and representative collection of Tweedside Apples; a printed catalogue of the whole being on distribution, indicating the sorts, kind of stock, form, age, &c., of trees from which gathered, with particulars as to the situation of gardens, soil, &c.

Exhibitors' Remarks.—With very few exceptions the trees are grown in the kitchen gardens, around or across the breaks used for ordinary cropping. All the Culinary sorts mentioned in the list are successfully grown along Tweedside on both Standards and Pyramids. The dessert sorts should be grown on walls with good exposure. On Standards and Pyramids they are generally very small.

The following collections from the Kitchen Gardens of Tweed-side were sent per Messrs. ORMISTON & RENWICK :—

1.—LADY BREWSTER, *Allerley*. Mr. P. JARDINE, *Gardener*.

Exhibitor's Remarks.—Situated on the north side of the Tweed, opposite Melrose, at an altitude of about 380 feet, with a southern exposure. Soil, ordinary loam on a gravelly subsoil.

2.—ALEXANDER CURLE, Esq., *Priorwood, Melrose*. Mr. WM. SHARPE, *Gardener*.

Observations.—A remarkably fine contribution.

Exhibitor's Remarks.—The Apple trees are grown as Standards, Bush, and Pyramids, grafted on the Free and Paradise stocks. They are about 6 years old. None of them have been root-pruned yet, but this season we shall go over most of them. They are summer pinched, and pruned early in spring. The garden is situate close to Melrose Abbey, 280 feet above the sea-level, and partly sheltered. Soil, a good sound loam, with gravelly subsoil. This is a splendid district for fruit, especially in the immediate vicinity of Melrose Abbey.

3.—JAMES CURLE, Esq., *Harleyburn*. Mr. W. ROLLO, *Gardener*.

Exhibitor's Remarks.—Garden situate 330 feet above the sea-level, and exposed to the west and north-west winds. Soil, a heavy red clay (greatly improved by large quantities of ashes dug in), with a cold tilly subsoil.

4.—The Rev. M. H. GRAHAM, *Maxton Manse*.

Exhibitor's Remarks.—Situation on the south bank of the Tweed, 260 feet above sea-level. Soil, heavy clay, 15 inches deep, with a cold, stiff subsoil. Here Lord Suffield and Stirling Castle canker very early. The trees are summer pinched, and pruned early in spring.

5.—Lieut.-Gen. HENRY, C.B., *Pavilion*. Mr. W. DICK, *Gardener*.

Exhibitor's Remarks.—Situated 150 yards from the north side of the Tweed, at an altitude of 455 feet. Soil, a sandy loam, with a gravelly subsoil. The trees are growing in grass, formerly cultivated as a kitchen garden.

6.—The EARL OF HOME, *Hirsel, Coldstream*. Mr. JOHN CAIRNS, *Gardener*.

Observations.—Most of the examples large and well grown, paler in colour, but otherwise equal to the best fruits grown in the south.

Exhibitor's Remarks.—Our Apple trees are grown on the Standard, Pyramid, and Bush form, principally the former, being trained with spreading heads and close pruned; those trained otherwise are also kept close pruned. Root-pruning is regularly attended to, so many trees being done every year. They are grafted mostly on the Crab, a few Bush trees being on the Paradise. Situation, partly sheltered. Soil, a good strong loam; subsoil, inclined to clay. We are about a mile from the River Tweed, and fourteen from the sea. We suffer much from spring frosts, the blossom being often destroyed. For small gardens we would recommend the Paradise stock.

7.—Miss SCOTT MACDOUGALL, *Makerstoun*. Mr. JAMES FAIRBAIRN, *Gardener*.

Observations.—Examples large and very well grown.

Exhibitor's Remarks.—The garden is situate on the north bank of the Tweed. It is flat, and well sheltered on all sides. Soil, a good loam; subsoil, gravelly.

8.—The Hon. J. C. MAXWELL-SCOTT, *Abbotsford*. Mr. HENRY SCOTT, *Gardener*.

Observations.—Examples very fine.

Exhibitor's Remarks.—Trees mostly grown as Pyramids. Garden situate on the south side and close to the Tweed, 400 feet above the sea-level, with south-west exposure. Soil, a light loam on a gravelly subsoil.

9.—Mrs. MEIKLAM, *Gladswood*. Mr. GEORGE GREY, *Gardener*.

Observations.—Examples of good size.

Exhibitor's Remarks.—The garden is situate 500 feet above the sea-level, on a high bank, 260 feet above and close to the Tweed. Soil, a strong, stiff clay, with cold, tenacious subsoil.

10.—Lord POLWARTH, *Mertoun, St. Boswell's*. Mr. WILLIAM FOWLER, *Gardener*.

Exhibitor's Remarks.—Our trees may all be termed Dwarf Standards, from 18 to 20 years of age, grafted on the Crab. The garden is situate on the north side of the Tweed, on a sloping bank, facing southwards. Soil, a good ordinary loam; subsoil, gravelly.

11.—CHARLES TENNANT, Esq., *The Glen, Innerleithen*. Mr. M. MCINTYRE, *Gardener*.

Observations.—Examples of fair average size.

Exhibitor's Remarks.—Examples grown on walls. The gardens are 800 feet above the sea-level, with a southern exposure. Soil, a heavy clay; subsoil, rock and till.

Varieties of Apples suitable for Cultivation in Scotland—South Division.

SELECTED (1883) BY

Mr. R. P. BROTHERSTON, *Tynninghame, Prestonkirk.*

„ BRUNTON, *Gilmerton, Drem.*

„ CAIRNS, *Hirsel, N.B.*

J. CURLE, Esq., *Harleyburn.*

Mr. J. DAY, *Galloway House, Garlieston.*

„ M. DUNN, *Dalkeith Palace, Dalkeith.*

„ W. FOWLER, *Mertoun, St. Boswell's.*

„ W. KING, *Dalzell, Motherwell.*

MESSRS. ORMISTON & RENWICK, *Melrose.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins . . . }	7	Cox's Orange Pippin . }	1
Ribston Pippin . . . }		Cox's Pomona . . . }	
Kerry Pippin . . . }	6	Dalzell Manse . . . }	
Blenheim Orange . . . }	5	Duchess of Olden-	
Devonshire Quarrenden		burg }	
Cambusnethan Pippin }	4	Dutch Mignonne . . }	
Irish Peach }		Fearn's Pippin . . . }	
Thorle }		Friar Pippin }	
Claygate Pearmain . . }		Galloway Pippin . . }	
Early Harvest }	3	Golden Monday . . . }	
Egg or White Paradise		Golden Reinette . . . }	
Gravenstein }		Golden Pearmain . . }	
Worcester Pearmain . . }		Hubbard's Russet . . }	
American Apple . . . }	2	Lady Apple }	
East Lothian Seedling		Lady Henniker . . . }	
Margil }		Margaret }	
Oslin }		Nonpareil }	
Red Astrachan }		Nonesuch }	
Sturmer Pippin }		Old Golden Pippin . . }	
Wyken Pippin }	1	Pomeroy }	
Yellow Ingestrie . . . }		Red Calendar }	
Adams' Pearmain . . . }		Royal Pearmain . . . }	
Beauty of Kent }		Royal Somerset . . . }	
Boston Russet }		Silver Saturday . . . }	
Cellini Pippin }		Stone Pippin }	
Cornish Aromatic . . . }		White Moncrieff . . . }	
Court Pendu Plat . . . }		Winter Strawberry . . }	
Court of Wick }		Winter Pearmain . . }	

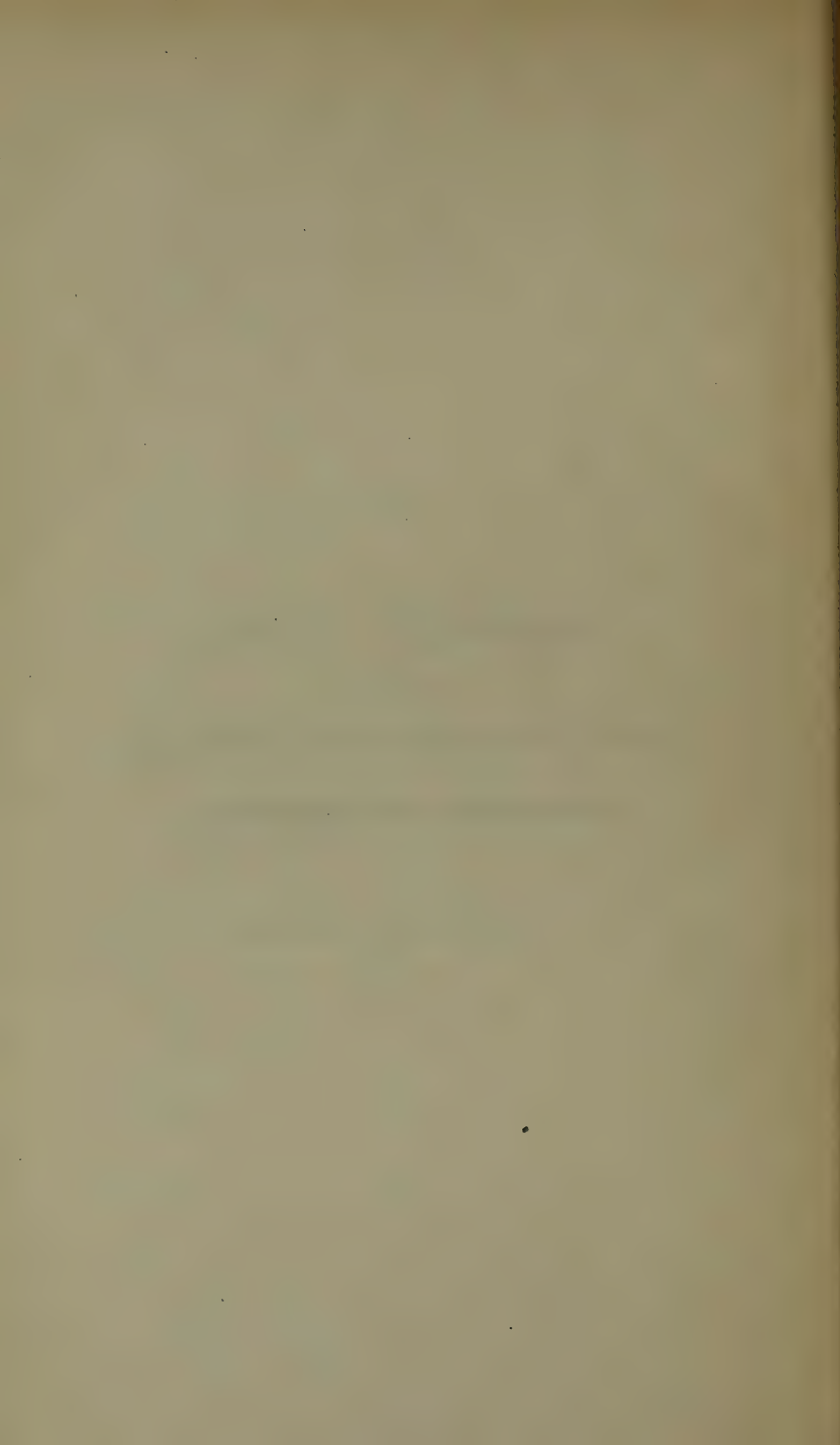
CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield . . .	9	Emperor Alexander . .	1
Ecklinville Seedling . .	8	Galloway Pippin . .	
Stirling Castle . . .		Grenadier	
Warner's King . . .	5	Improved Keswick Codlin	
Alfriston		Kentish Fillbasket . .	
Dumelow's Seedling . .	4	Lauder Lud	
Keswick Codlin . . .		Late Marrow	
Cellini	2	Leadington	
Cox's Pomona		Luffness Matchless . .	
Manks' Codlin	1	Nelson's Codlin . . .	
Duchess of Oldenburg .		Norfolk Storing . . .	
Fullwood	1	Pott's Seedling . . .	
Golden Noble		Red Ingestrie	
Hawthornden	1	Royal Codlin	
Mère de Ménage . . .		Reinette de Canada . .	
New Hawthornden . .	1	Sheep's Head	
Northern Greening . .		Stone's Apple	
Small's Admirable . .	1	Tower of Glamis . . .	
Stoup Leadington . . .		Violette	
Atkin's No. 2	1	Waltham Abbey Seed- ling	
Baltimore		White Melrose	
Betty Geeson	1	Winter Fullwood . . .	
Blenheim Orange . . .		Willy Bonny	
Carse o' Gowrie . . .	1	Yorkshire Greening . .	
Dolphin			
Duke of Devonshire . .			
Dutch Fullwood . . .			

GROUP VIII.

SCOTLAND—MIDLAND DIVISION.

FORFARSHIRE AND PERTHSHIRE.



SCOTLAND—MIDLAND DIVISION.

*Exhibitors.*1.—Mr. J. CAMERON, *Auchterarder House, Perthshire.*

Observations.—Examples small and deficient in colour, excepting those grown on walls.

Exhibitor's Remarks.—Grown on Standards in borders inside a walled garden, varying in age from 20 to 50 years. Situation, sheltered, facing north. Soil, stiff black loam, approaching clay. Trees are much given to canker if bruised, and very much covered with moss in winter. The sun's rays strike but a very small portion of the ground, and in mid-winter the sun is not seen. Stirling Castle, King of the Pippins, Lord Suffield, and Hawthornden bear well almost every year.

2.—Mr. D. DOIG, *The Gardens, Rossie Priory, Inchtute, Perthshire.*

Exhibitor's Remarks.—Grown on Bush trees from 6 to 15 feet high, planted in the borders by the sides of the walks in a kitchen garden. Those which are grafted on the Free stock are about 50 years old; the others, on the Paradise, are about 12 years; upon this stock some varieties do not succeed, the trees becoming cankered. The gardens are well sheltered by trees, and are situated at the bottom of a hill, about 80 feet above the sea-level. Soil, a black loam 18 inches deep; subsoil, a sandy gravel, very deep. The lowest part of the ground is subject to hoar frosts and fog. Both trees and fruit are very subject to the growth of lichen.

3.—Mr. P. W. FAIRGRIEVE, *The Gardens, Dunkeld, Perth.*

Observations.—Examples mostly small and deficient in colour.

Exhibitor's Remarks.—Grown on dwarf Standard and Bush trees 8 years old, mostly grafted on the Paradise. Situation, sheltered, with a south aspect, 176 feet above sea-level. Soil, light; subsoil, gravel.

4.—Mr. A. MCKINNON, *Gardener, Scone Palace, Perth.*

Observations.—A very interesting and excellent contribution. Many examples large and fine.

Exhibitor's Remarks.—Grown on Bush, Pyramid, and Espalier trees, grafted on the Paradise and Free stocks. Situation, low, but sheltered on all sides. Soil, a heavy rich loam, resting on a clay bottom. Apples in this part of Scotland are very late and very small.

5.—Mr. McDONALD, *Woodlands House, Perth.*

Observations.—Examples of Cellini, very large and fine, stated to have been grown on Cordon on Paradise stock.

6.—Mr. JOHN REID, *Gardener to The Honourable Mrs. Trotter, Ballindean, Inchtute.*

Observations.—A fairly good collection, the fruit being of good size, but wanting in colour.

Exhibitor's Remarks.—Grown on Standard and Bush trees about 50 years old, but little interfered with in the way of pruning, and allowed plenty of room. They are mostly grafted on the Free stock, some on Paradise, and grown in open orchard on grass. Soil, a good loam, with clay subsoil. I sent a very small collection of Apples, some 20 sorts, but they comprise nearly all the kinds of real value in the East of Scotland; at least all that have come under my observation, and I happen to have had a good deal to do with Apples. The orchard, which I have had for 30 years under my charge (some 8 or 10 acres), was planted by my father-in-law about 60 years ago; and he, being a great fancier of Apples, gathered together all the varieties he could secure. Many of these I have regrafted with others, but still we have about 100 sorts, specimens of which I might have forwarded. As I have sold fruit in the Dundee Market, which is perhaps the largest market in Scotland for home-grown Apples, I am able to assert that there are not more than 20 or 30 sorts of any value that ever appear in the market. One-half of our present kinds of Apples ought to be swept out of the list altogether, as small Apples are a perfect drug in the market. I find that any good soft eating Apple will sell in the summer months, but the kinds that are the most valuable are the Codlins, and Apples of that sort. They can be sold in large quantities, big and little, just as they come off the trees, for making jelly. Eating or table Apples are but little sought after in August or September, as there are plenty of other fruits, but in October such sorts as Irish Green, Winter Strawberry, Lady's Finger, and King of the Pippins sell fairly well. Thirty years ago there was scarcely any use for cooking Apples, good eating Apples being all that was required; now the whole demand is for large cooking Apples, while eating or dessert Apples (for winter especially) are driven out of the market by the American kinds. Warner's King, Stirling Castle, Manks' Codlin, Hawthornden, and Cellini are varieties that pay well for autumn use; and Yorkshire Greening, Tower of Glamis, and Grey Cheek for winter use, the latter being a very valuable sort. These Apples I have named were the leading sorts 30 years ago, and they are the leading sorts still.

7.—Dr. ROBERTSON, *Fern Bank House, Errol.*

Exhibitor's Remarks.—Grown on Standards and Bush trees, from 12 to 100 years old; the Standard trees on the Crab stock, the others on the Paradise. Situation, in walled garden, sheltered. Soil, a pretty good black loam; subsoil, a useless clay, red in colour, and entirely unfit for vegetation. The Ribston Pippin requires a wall here and a southern aspect, otherwise it is apt to canker. In a cold subsoil the New Hawthornden is very apt to canker, otherwise it is an excellent sort. In the numerous Carse orchards here, I am sorry to say, fruit culture has been much neglected, both as to root and top pruning, as well as in manuring and in the proper selection of kinds, many large orchards getting no attention whatever. The Carse of Gowrie is a splendid fruit district. I have known samples of Lord Suffield grown here by amateurs, on the Crab stock, $17\frac{1}{2}$ ounces in weight. In my opinion fruit is not half so well cultivated here as it might and ought to be. We want, in fact, more enlightened cultivation.

8.—Mr. GEORGE KIDD, *The Gardens, Megginch Castle, Errol.*

Observations.—Examples of good size and quality.

Exhibitor's Remarks.—Apples grown as Standards, from 7 to 20 years old, grafted on the Paradise stock. They are planted in the borders round the garden. Soil, a heavy clay, trenched, and manured round the roots all the winter. I have over 170 trees, and I lift a number of them every year, give them new soil, and then plant them again where they were. Each tree is lifted every third year in rotation. If weather permits, I begin replanting them about the 1st of November.

9.—Mr. BENVIE, *Gardener to J. B. Morrison, Esq.,
Murie, Errol.*

Exhibitor's Remarks.—Apple trees are mostly large Standard, from 50 to 100 years old, on the Crab stock. A few Dwarf trees on the Paradise. Situation, good, with a south exposure, and on the highest part of the Carse. They are grown on pasture and on cultivated ground. Soil, clay and a rich loam; subsoil, partly sand and partly clay.

10.—The Rev. W. WHYTE, U.P., *Manse, Pitrodie, Perth.*

Exhibitor's Remarks.—Grown on large Standard trees, from 50 to 100 years old, grafted on the Crab or Free stock. Situation, sheltered, with a good southern exposure. Soil, a strong damp clay.

Varieties of Apples suitable for Cultivation in Scotland— Midland Division.

SELECTED (1883) BY

- Mr. J. CAMERON, *Auchterarder House, Auchterarder.*
 „ D. DOIG, *Rossie Priory, Inchtute.*
 „ P. W. FAIRGRIEVE, *Dunkeld House, Dunkeld.*
 „ A. FORBES, *Pitfour Castle, Perth.*
 „ G. KIDD, *Megginch Castle.*
 „ A. MCKINNON, *Scone Palace, Perth.*
 „ J. REID, *Ballindean, Inchtute.*
 Dr. ROBERTSON, *Errol.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins .	7	Early Margaret . .	1
Ribston Pippin . . .	6	Emperor Alexander .	
Golden Pippin . . .	4	Eve, or Irish Pitcher	
Kerry Pippin . . .		Fearn's Pippin . .	
Summer Whorle . . .	3	Golden Russet . . .	
Court of Wick . . .		Gravenstein Pippin .	
Devonshire Quarrenden	3	Irish Green	
Winter Strawberry . .		Lass o' Gowrie . .	
Arbroath Pippin (Oslin)	2	Majestic	
Blenheim Orange . .		Mannington's Pear-	
Cambusnethan Pippin	2	main	
Claygate Pearmain . .		Mother	
Cox's Orange Pippin .	2	Oslin	
Irish Peach		Paradise, or Lady's	
Orange Pippin	1	Finger	
Ravelston Pippin . .		Paradise Pippin . .	
Sturmer Pippin . . .	1	Pearson's Plate . .	
Summer Strawberry .		Pine Golden Russet .	
Worcester Pearmain .	1	Professor	
Cellini		Red Ingestrie . . .	
Cockle's Pippin . . .	1	Red Astrachan . .	
Court Pendu Plat . .		Reinette Jaune Hâtive	
Cupar Market	1	Scarlet Nonpareil . .	
Downton Pippin . . .		Striped Beefing . .	
Duke of Devonshire .	1	Trumpington . . .	
Dutch Mignonne . . .		White Juneating . .	
Early Julien	1	Wyken Pippin . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Stirling Castle . . .	8	Dunmore Pearmain .	1
Tower of Glamis . . .	7	Dutch Codlin . . .	
Lord Suffield }	6	Early Julien	
Warner's King }		Eve, or Manks' Codlin	
Cellini }	4	Hambledon Deux Ans	
Dumelow's Seedling . . }		Hill's Seedling . . .	
Ecklinville Seedling . . }		Jolly Beggar	
Keswick Codlin }		Lady Henniker . . .	
Emperor Alexander . . }	3	Lord Derby	
Hawthornden }		Nelson's Glory . . .	
Lord Dunmore }		Norfolk Bearer . . .	
Manks' Codlin }		Old Golden Pippin . .	
New Hawthornden . . . }		Phillip's Seedling	
Yorkshire Greening . . }	2	(Cellini)	
Rymer		Pott's Seedling . . .	
Alfriston }	1	Ringer	
Baldwin }		Round Winter None-	
Betty Geeson }		such	
Blenheim Pippin }		Small's Incomparable	
Carlisle Codlin }		White Codlin	
Catshead }		Winter Hawthornden	
Cox's Pomona }			

GROUP IX.

SCOTLAND—NORTHERN DIVISION.

MORAYSHIRE AND ORKNEY.

SCOTLAND—NORTHERN DIVISION.

*Exhibitors.*1.—MR. JOHN CLARK, *Gardener, Brodie Castle, Morayshire.*

Observations.—Examples small, but the contribution interesting as containing many of the earlier Scottish Apples.

Exhibitor's Remarks.—All grown on Standard trees, with one exception, viz., Paradise Pippin, or Adams' Apple, which is from an old Espalier. The trees are about 25 years old, and mostly grafted on the Crab, with a few on the Paradise. Situation, sheltered. Soil, a black sandy loam; subsoil, gravel, with oxide of iron in it. On comparing notes with others, I have come to the conclusion that Apples do not grow to the same size nor ripen so well in the north as they used to. A neighbour was telling me that he was rooting out all the tender kinds, and substituting Kitchen sorts, such as Lord Suffield, Stirling Castle, and Tower of Glamis. Lord Suffield is one of the most constant bearers we have, as also is Brown Codlin, a sort that does well here, and is esteemed for a fine aromatic flavour when cooked. Golden Pippin (? Downton) grows without any trace of canker, but the fruit has been so small of late years that it is comparatively worthless. The same may be said of all the small sorts. Hawthornden and Ribston Pippin both canker very much, so also does Cellini and Stirling Castle on the Paradise stock. I consider the subsoil here very bad for fruit trees, being so very much impregnated with iron and a black hard substance locally called Pan or Moray crust.

2.—MR. THOMAS McDONALD, *Balfour Castle Gardens, Kirkwall, Orkney.*

Observations.—An extremely interesting contribution from so northern a latitude; the examples small, very green, hard, and acid.

Exhibitor's Remarks.—Grown on trained trees, on walls, from 8 to 30 years of age, and generally bear a very fair crop.

Varieties of Apples suitable for Cultivation in Scotland— North Division.

SELECTED (1883) BY

Mr. J. CLARK, *Brodie Castle, Morayshire.*

„ T. McDONALD, *Balfour Castle, Orkney.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Golden Pippin }	2	Gogar Pippin }	1
(? Downton) }		Lamb Abbey Pearmain }	
Ribston Pippin }	1	Late Nonpareil }	
Adams' Apple (or Paradise Pippin) }		Oslin }	
Blenheim Orange }		Peach Apple }	
Boston Russet }		Pitmaston Nonpareil }	
Brabant Bellefleur }		Red Astrachan }	
Early Harvest }		Strawberry Pippin }	
		Summer Thorle }	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield }	2	Keswick Codlin }	1
Stirling Castle }		Lady Apple (?) }	
Alexander }	1	Nonesuch }	
Brown Codlin }		Norfolk Beefing }	
Carlisle Codlin }		Northern Greening }	
Dutch Codlin }		Tower of Glamis }	
Hawthornden }		Yorkshire Greening }	
Kentish Fillbasket }			

GROUP X.

WALES.

SOUTH WALES.

*Exhibitors.*1.—General BENSON, C.B., *Fairy Hill, Swansea.*

Exhibitor's Remarks.—Gathered mostly from Standard trees about 20 years old, and others from old trees on the farm. Situation, $2\frac{1}{2}$ miles from the sea, on the Gower Coast, and much exposed to wind. Soil, limestone, also sandstone and clay. Ribston Russet is the common Apple of the country. Old trees are great bearers, such as Hoary Morning and Bevan's Seedling, a variety raised from Hoary Morning 20 years ago. Ribston Pippin will not do well here, as it cankers.

2.—Mr. G. GRIFFIN, *Slebeck Park, Haverfordwest.*

Observations.—A very fine, well-grown collection.

Exhibitor's Remarks.—These Apples are the produce of the orchards here, which contain nearly every variety grown in the county. They are grown on Standard and Bush trees on the Crab; some are aged, slow-growing trees, and very fruitful, but are very subject to the growth of lichen, which is kept under by dusting with fresh lime on damp days in winter. Situation, bank of tidal river, 10 miles from sea, and exposed to the south-west gales off the Atlantic. Soil, heavy, rather shallow, on clay mixed with broken Silurian rock; well drained. Few Apples are grown, there not being a sufficient quantity for the demand. When there is a full crop in England, the local fruiterers receive large consignments. The soil appears to be too cold and damp, and the trees canker; but here the soil is well-drained, and good varieties are planted, and there is a good return.

SELECTION OF TWENTY-FOUR VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Culinary.—Hawthornden, Keswick Codlin, Kentish Fillbasket, Alfriston, Ecklinville Seedling, Tower of Glamis, Warner's King, Dumelow's Seedling, Blenheim Orange, Mère de Ménage, Striped Beefing, Hanwell Souring. *Dessert.*—Early Harvest, Irish Peach, Devonshire Quarrenden, Kerry Pippin, Fearn's Pippin, Ribston Pippin, Wyken Pippin, King of the Pippins, Claygate Pearmain, Cox's Orange Pippin, Dutch Mignonne, Sturmer Pippin.

SELECTION OF TWELVE VARIETIES MOST SUITED FOR CULTURE IN THE DISTRICT, NAMED IN ORDER OF SUCCESSION.

Culinary.—Hawthornden, Kentish Fillbasket, Alfriston, Dumelow's Seedling, Blenheim Orange, Hanwell Souring. *Dessert.*—Early Harvest, Devonshire Quarrenden, Fearn's Pippin, Ribston Pippin, Wyken Pippin, Cox's Orange Pippin.

SELECTION OF TEN VARIETIES SUITED FOR MARKET CULTURE.

Hawthornden, Keswick Codlin, Kentish Fillbasket, Blenheim Orange, Striped Beefing, Alfriston, King of Pippins, Hanwell Souring, Wyken Pippin, Devonshire Quarrenden. These are all heavy croppers here. There is no systematic growing of fruit for market in this county.

Varieties of Apples suitable for Cultivation in South Wales.

SELECTED (1883) BY

General BENSON, C.B., *Fairy Hill, Swansea.*

Mr. GEORGE GRIFFIN, *Haverfordwest.*

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	2	King of the Pippins .	1
Blenheim Orange . .	1	Lodgemore Nonpareil	
Carraway Russet . .		Pitmaston Russet	
Cockle's Pippin . . .		Nonpareil . . .	
Devonshire Quarrenden		Red Astrachan . .	
Fearn's Pippin . . .		Scarlet Nonpareil . .	
Kerry Pippin		Wyken Pippin . . .	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Alfriston	2	Hoary Morning . . .	1
Keswick Codlin . . .		Lord Suffield . . .	
Wellington (Dumelow's Seedling)		Minchall Crab . . .	
Beauty of Kent . . .	1	New Hawthornden .	
Blenheim Orange . .		Northern Greening .	
Catshead Codlin . .		Reinette de Canada .	
Dredge's Emperor . .		Royal Pearmain . .	
Gloria Mundi		Royal Russet . . .	
Gravenstein		Warner's King . . .	
Hanwell Souring . .		Winter Greening	
Hawthornden		(French Crab) . . .	

GROUP XI.

JERSEY.

JERSEY.*Exhibitor.*

Mr. C. B. SAUNDERS, *Cæsarean Nurseries, St. Helier's, Jersey.*

Observations.—These, as representative of the Apples grown in Jersey, which are generally supposed to be greatly superior to those grown even in Kent, were of great interest.

Exhibitor's Remarks.—Grown on dwarf Bush and Pyramidal trees, some of the Ribston Pippins being against walls. They are mostly grafted on Paradise stock. Situation, elevated, but sheltered by trees and hedges. Soil, a strong loam, upon a clay subsoil. Apple trees thrive and are very productive in the island of Jersey wherever a good stiff soil and an airy situation are at command. Shelter is necessary, both for the protection of the blossoms from the cold winds of spring, and the crops from the autumnal gales. Many of the smaller dessert sorts produce large quantities of excellent fruit on the Paradise stock, whilst the stronger growing and more vigorous kinds, producing the larger fruits, thrive best on the Crab stock. These last are mostly culinary kinds, and may be kept upon a damp dark floor, or in a cold airy loft. I give preference to the former, as it preserves the flavour of the fruit, if they do not keep so long. Covering dessert Apples whilst in store with large sheets of white paper greatly improves the appearance, whether intended for the dessert table or for sale.

Varieties of Apples suitable for Cultivation in Jersey.

SELECTED BY

Mr. C. B. SAUNDERS, *St. Helier's, Jersey.*

Dessert Apples.—Court of Wick, Cox's Orange Pippin, Downton Pippin, Hicks' Fancy, Hooper's Seedling, King of the Pippins, Pigeonette, Reinette de Versailles, Red Astrachan, Ribston Pippin, Stibbert, Yellow Ingestrie.

Culinary Apples.—Blenheim Orange, Cox's Pomona, English Codlin, Golden Noble, Grand Alexander, Emperor Alexander, Hawthornden, Jacques Lebel, Lord Suffield, Monstrous Pippin, Reinette de Canada, Royal Russet, Scarlet Pearmain.

GROUP XII.

IRELAND.

IRELAND.

Exhibitors.

1.—Mr. GEORGE EDGAR, *Gardener, Crossgar, Co. Down.*

2.—Mr. H. WALKER, *Derry.*

Observations.—Examples deficient in colour.

Exhibitor's Remarks.—The two finest dessert Apples here are the Irish Peach and Summer Strawberry; the former is a fine habited tree, and a sure bearer, but the fruits are not large; the latter is a thin bearer, but equal in quality to any of the American kinds. In our windy climate both are deserving of walls; they are not pruned, the shoots being simply laid in. Ecklinville and Keswick Codlin are very fine free-bearing sorts. Lord Suffield, as a dwarf tree, bears a greater weight than any other, and the fruit are larger. King of the Pippins bears very freely, the fruit being of splendid colour, hanging like ropes of onions, and at a distance resembling a crop of oranges. Our local "Ballyfatten" is a constant bearer, of a dry, mild flavour, and is an excellent baker. "Green Chisel," "Green Sweet," and "Red Kane" are local sorts of repute. The "Jane Moyle" (Jennet Moyle), brought by the monks to Mongavelin Castle, near here, is as fine as a Ribston. I would say that single vertical Apple trees on walls would supply high-class fruits, without spurring or "pinching," as it is called here, as this treatment has decimated everything in our soft climate. Long-wooded kinds require space and time to mature; cutting back closely is productive of immature shoots, and pinching is infinitely worse.

List of Varieties selected by the Exhibitors as best suited for Cultivation. Arranged in Order of Selection ; those receiving only One Vote being omitted.

GROUP I.

SOUTHERN COUNTIES (ENGLAND).

Number of Voters 46

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin .	37	Adams' Pearmain. .	4
King of the Pippins .	34	Reinette de Canada .	3
Ribston Pippin . . .	27	Lord Burghley. . .	
Blenheim Orange . .	19	Winter Quoining . .	
Kerry Pippin. . . .	18	Golden Pippin . . .	
Cockle's Pippin . . .	15	Old Nonpareil . . .	
Devonshire Quarrenden		Golden Reinette . .	3
Court Pendu Plat . .	14	Winter Pearmain . .	
Sturmer Pippin . . .		Rosemary Russet . .	
Scarlet Nonpareil . .	12	Cornish Gilliflower .	
Irish Peach		Boston Russet . . .	
Yellow Ingestrie . .	11	Syke House Russet .	2
Fearn's Pippin . . .	10	Melon	
Worcester Pearmain .	8	Northern Spy . . .	
Claygate Pearmain. .	6	Summer Pippin . . .	
Margil		Juneating	
Mannington's Pearmain	5	Downton	2
Mr. Gladstone . . .		Cornish Aromatic . .	
Red Astrachan . . .	4	Pearson's Plate . . .	
Lemon Pippin		Red Juneating . . .	
Court of Wick	4	Russet Nonpareil . .	
Wyken Pippin		Coe's Golden Drop . .	2
Duchess of Oldenburg	5	Early Harvest . . .	
Gravenstein		Wormsley Pippin . .	
Golden Knob	4	Early or Summer	
Herefordshire Pearmain		Nonpareil	
Duchess's Favourite .	4	Reinette de Caux . .	
Dutch Mignonne . . .		Lamb Abbey Pearmain	
Braddick's Nonpareil .			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Dumelow's Seedling	38	Round Winter Nonesuch	4
Lord Suffield	36	Frogmore Prolific	
Warner's King	27	Gloria Mundi	
Keswick Codlin	26	Pott's Seedling	
Blenheim Orange	25	Peasgood's Nonesuch	3
New or Winter Hawthornden	21	Tower of Glamis	
Cellini	18	Gooseberry Apple	
Ecklinville Seedling	15	Hollandbury	
Stirling Castle		Yorkshire Beauty	2
Golden Noble	14	Grenadier	
Manks' Codlin		Hambledon Deux Ans	
Northern Greening	13	Brabant Bellefleur	
Cox's Pomona	12	Dutch Mignonne	2
Alfriston	11	Betty Geeson	
Hawthornden		Royal Russet	
Mère de Ménage	10	Lane's Prince Albert	
Loddington Seedling		Dutch Codlin	2
Beauty of Kent	8	Worcester Pearmain	
Emperor Alexander		Lady Henniker	
Annie Elizabeth	7	French Crab	
Waltham Abbey Seedling	6	Hoary Morning	2
Lord Derby	6	Reinette de Canada	
Norfolk Beefing		Flower of Kent	
Winter Quoining	5	Small's Admirable	
Bedfordshire Foundling		London Pippin	2
Bess Pool	5	Nonesuch	
Yorkshire Greening		Lemon Pippin	
Hanwell Souring	4	Hubbard's Pearmain	
		Norfolk Bearer	

NOTE.—Blenheim Orange—Dessert, 19 votes } 44 votes.
 „ „ Culinary, 25 „ }

GROUP III.

MIDLAND COUNTIES—SOUTH (ENGLAND).

Number of Voters 15

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . . }	13	Mr. Gladstone . . . }	4
King of the Pippins . . . }		Braddick's Nonpareil . . . }	
Ribston Pippin	11	Worcester Pearmain . . . }	3
Kerry Pippin	9	Blenheim Orange . . . }	
Devonshire Quarrenden . . .	7	Margil	
Sturmer Pippin	6	Cockle's Pippin . . . }	2
Irish Peach	5	Yellow Ingestrie . . . }	
Fearn's Pippin		Early Margaret . . . }	2
Claygate Pearmain		Golden Reinette . . . }	
Adams' Pearmain		Scarlet Pearmain . . . }	
Scarlet Nonpareil	4	Mannington's Pearmain . . . }	
Wyken Pippin		Early Julien	
Court of Wick		Mabbot's Pearmain . . . }	
Court Pendu Plat			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield	12	Emperor Alexander . . . }	4
Keswick Codlin		Norfolk Beefing . . . }	
Blenheim Orange	11	Alfriston	3
Dumelow's Seedling		Mère de Ménage . . . }	
Cellini	9	Grenadier	2
Golden Noble	8	Beauty of Kent . . . }	
Ecklinville Seedling	7	Duchess of Oldenburg . . . }	
Hawthornden	5	Betty Geeson	
Cox's Pomona		Tower of Glamis . . . }	
Lord Derby	4	Hanwell Souring . . . }	
Lord Grosvenor		Rymer	
Stirling Castle		Lane's Prince Albert . . . }	
New or Winter Hawthornden		Peasgood's Nonesuch . . . }	
Manks' Codlin		French Crab	
		Rosemary Russet . . . }	

NOTE.—Blenheim Orange—Dessert, 3 votes } 15 votes.
 „ „ Culinary, 12 „ }

GROUP IV.

MIDLAND COUNTIES—NORTH (ENGLAND).

Number of Voters 11

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . . }	7	Adams' Pearmain . . . }	
Blenheim Orange . . . }		Early Margaret . . . }	
King of the Pippins . . . }	6	Golden Pippin . . . }	
Ribston Pippin . . . }	5	Golden Reinette . . . }	
Irish Peach . . . }		Golden Winter Pear-	
Court of Wick . . . }	4	main . . . }	
Court Pendu Plat . . . }		Juneating . . . }	2
Kerry Pippin . . . }	3	Margil . . . }	
Sturmer Pippin . . . }		Newtown Pippin . . . }	
Fearn's Pippin . . . }	3	Old Bess Pool . . . }	
Maltster . . . }		Improved Bess Pool . . }	
Mr. Gladstone . . . }		Claygate Pearmain . . }	
Nonpareil . . . }		Scarlet Nonpareil . . }	
Wyken Pippin . . . }			

CULINARY APPLES.

Name	No. of Votes	Name.	No. of Votes
Lord Suffield . . . }	9	Lord Grosvenor . . . }	3
Keswick Codlin . . . }		Mère de Ménage . . . }	
Dumelow's Seedling . . . }	8	Betty Geeson . . . }	
Cellini . . . }	7	Cox's Pomona . . . }	
Warner's King . . . }		Emperor Alexander . . }	
Ecklinville Seedling . . . }	5	Costard . . . }	
Golden Noble . . . }		Rymer . . . }	
Alfriston . . . }	4	Domino . . . }	
Blenheim Orange . . . }		Manks' Codlin . . . }	2
New or Winter		Minchal Crab . . . }	
Hawthornden . . . }		Pott's Seedling . . . }	
Queen Caroline . . . }	3	Small's Admirable . . . }	
Annie Elizabeth . . . }		Stirling Castle . . . }	
Hawthornden . . . }		Wareham Russet . . . }	
Duchess of Oldenburg		Yorkshire Greening . . }	
Northern Greening . . . }			

NOTE.—Blenheim Orange—Dessert, 7 votes } 11 votes.
 „ „ Culinary, 4 „ }

GROUP V.

WESTERN COUNTIES (ENGLAND).

Number of Voters 17

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . . }	12	Fearn's Pippin . . . }	3
King of the Pippins . . }		Worcester Pearmain . . }	
Ribston Pippin	11	Red Astrachan	
Irish Peach	8	Adams' Pearmain	
Margil	6	Mannington's Pearmain	
Court Pendu Plat	5	Crimson Queening	2
Devonshire Quarrenden		Old Nonpareil	
Kerry Pippin		Nonpareil	
Blenheim Orange		Golden Winter Pearmain	
Ashmead's Kernel		London Pippin	
Sturmer Pippin	4	Duke of Devonshire	2
Scarlet Nonpareil		Cockle's Pippin	
Yellow Ingestrie		Court of Wick	
Wyken Pippin	3	Claygate Pearmain	2
Cornish Gilliflower			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Blenheim Orange	14	Manks' Codlin	4
Dumelow's Seedling		Peasgood's Nonesuch	3
Keswick Codlin	13	Lord Derby	
Lord Suffield		Alfriston	2
Warner's King	10	Cox's Pomona	
Hawthornden	8	Northern Greening	2
New or Winter Hawthornden	6	Yorkshire Beauty	
Golden Noble		Bess Pool	2
Tom Putt	6	Catshead	
Cellini		Red Hawthornden	2
Ecklinville Seedling	5	Reinette de Canada	
Stirling Castle		Beauty of Kent	2
Tower of Glamis	4	Emperor Alexander	

NOTE.—Blenheim Orange—Dessert, 5 votes } 19 votes.
 „ „ Culinary, 14 „ }

GROUP VI.

NORTHERN COUNTIES (ENGLAND).

Number of Voters 10

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Cox's Orange Pippin . . }	8	Red Astrachan . . . }	3
King of the Pippins . . }		Yellow Ingestrie . . }	
Ribston Pippin . . . }	6	Adams' Pearmain . . }	2
Blenheim Orange . . }	5	Court Pendu Plat . . }	
Irish Peach }		Fearn's Pippin . . . }	
Kerry Pippin }	4	Margil }	
Early Margaret . . . }		Scarlet Nonpareil . . }	
Claygate Pearmain . . }	3	Sturmer Pippin . . . }	
Devonshire Quarrenden }		Syke House Russet . . }	

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield }	9	Stirling Castle . . . }	3
Keswick Codlin . . . }	7	Alfriston }	
Dumelow's Seedling . . }	6	Bedfordshire Found- ling }	2
New Hawthornden . . }		Cockpit }	
Warner's King }	4	Ecklinville Seedling . . }	
Emperor Alexander . . }		Greenup's Pippin . . . }	
Cellini }	3	Hawthornden }	
Cox's Pomona }		Ringer }	
Manks' Codlin }		Tower of Glamis . . }	
Pott's Seedling }			

GROUPS VII. TO IX.

SCOTLAND.

Number of Voters 18

DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
Ribston Pippin . . .	15	Early Harvest . . .	4
King of the Pippins . .	14	Sturmer Pippin . . .	
Kerry Pippin	10	Winter Strawberry . .	
Summer Thorle	9	Cox's Orange Pippin . .	3
Blenheim Orange . . . }	8	Wyken Pippin	
Devonshire Quarrenden }		Adams' Pearmain . . . }	
Golden Pippin }	7	Dutch Mignonne . . . }	2
Irish Peach }		Boston Russet }	
Cambusnethan Pippin . }		Cellini }	
Oslin }	6	Court Pendu Plat . . . }	
Claygate Pearmain . . }		Fearn's Pippin }	
Egg, or White Paradise }	5	Nonpareil }	
Worcester Pearmain . . }		Gogar, or Stone }	
Court of Wick }	4	Margil }	
Gravenstein }		Yellow Ingestrie . . . }	
Red Astrachan }			

CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Stirling Castle	18	Emperor Alexander . .	5
Lord Suffield	17	Small's Admirable . . }	3
Warner's King	14	Lord Dunmore }	
Ecklinville Seedling . .	12	Betty Geeson }	
Keswick Codlin	10	Blenheim Orange . . . }	2
Cellini }	9	Carlisle Codlin }	
Dumelow's Seedling . . }		Dutch Codlin }	
Tower of Glamis . . . }		Rymer }	
Manks' Codlin	8	Duchess of Oldenburg }	
New, or Winter Haw-	7	Fullwood }	
thornden }		Golden Noble }	2
Alfriston }	6	Kentish Fillbasket . . }	
Hawthornden }		Mère de Ménage . . . }	
Yorkshire Greening . . }		Northern Greening . . }	
Cox's Pomona }	5	Stoup Leadington . . }	

NOTE.—Blenheim Orange—Dessert, 8 votes } 10 votes.
 „ Culinary, 2 „ }

**List of 120 Apples selected by 130 Exhibitors. Poll
taken for the whole of Great Britain.**

Number of Returns from Exhibitors 130

60 DESSERT APPLES.

Name	No. of Votes	Name	No. of Votes
King of the Pippins .	98	Dutch Mignonne . .	6
Cox's Orange Pippin .	89	Cambusnethan Pippin	
Ribston Pippin . . .	78	Oslin	
Kerry Pippin	56	Cornish Gilliflower .	
Blenheim Orange . .	52	Early Harvest . . .	
Irish Peach	48	Nonpareil	5
Devonshire Quarrenden	42	Golden Knob	
Sturmer Pippin . . .	41	Herefordshire Pear-	
Scarlet Nonpareil . .	31	main	
Court Pendu Plat . .	29	Boston Russet . . .	
Yellow Ingestrie . .	27	Syke House Russet .	4
Fearn's Pippin . . .		Russet Nonpareil . .	
Claygate Pearmain . .	26	Ashmead's Kernel .	
Worcester Pearmain .	23	Egg or White Paradise	3
Margil		Winter Strawberry .	
Wyken Pippin	22	Lord Lennox	
Cockle's Pippin . . .	21	Juneating	3
Court of Wick	19	Duchess's Favourite .	
Red Astrachan	18	Reinette de Canada .	
Adams' Pearmain . . .	15	Lord Burghley . . .	3
Mr. Gladstone	13	Winter Pearmain . .	
Golden Pippin	11	Rosemary Russett . .	
Mannington's Pearmain	10	Melon	3
Gravenstein	9	Downton	
Summer Thorle	8	Golden Harvey . . .	
Lemon Pippin	7	Scarlet Pearmain . .	3
Braddick's Nonpareil .		Mabbott's Pearmain .	
Early Margaret	6	Pine Golden Pippin .	
Old Nonpareil		Pine Apple Russet .	
Golden Reinette . . .	6	Pearson's Plate . . .	
Duchess of Oldenburg			

60 CULINARY APPLES.

Name	No. of Votes	Name	No. of Votes
Lord Suffield	101	Hanwell Souring . . .	7
Dumelow's Seedling . .	93	Small's Admirable . .	
Keswick Codlin	84	Duchess of Oldenburg	
Warner's King	70	Lord Grosvenor . . .	6
Blenheim Orange . . .	63	Grenadier	
New or Winter Hawthornden	52	Reinette de Canada . .	
Cellini	49	Tom Putt	5
Ecklinville Seedling . .	48	Rymer	
Stirling Castle	41	Winter Quoining . . .	
Hawthornden	37	Gloria Mundi	4
Manks' Codlin	36	French Crab	
Golden Noble	32	Round Winter Nonesuch	
Cox's Pomona	28	Frogmore Prolific . . .	3
Alfriston	21	Royal Russet	
Emperor Alexander . . .	19	Lane's Prince Albert . .	
Northern Greening . . .	18	Dutch Codlin	3
Tower of Glamis	15	Norfolk Bearer	
Mère de Ménage	12	Queen Caroline	
Beauty of Kent	11	Gooseberry Apple . . .	3
Lord Derby	10	Hollandbury	
Yorkshire Greening . . .	9	Yorkshire Beauty . . .	
Annie Elizabeth	8	Hambleton Deux Ans . .	3
Norfolk Beefing	7	Dutch Mignonne	
Loddington Seedling . . .	7	Hoary Morning	
Pott's Seedling	7	Gravenstein	3
Peasgood's Nonesuch . . .	7	Lord Dunmore	
Betty Geeson	7	Minchal Crab	
Waltham Abbey Seedling	7	Lady Henniker	3
Bedfordshire Foundling . .	7	Lemon Pippin	
Bess Pool	7	Catshead	

NOTE. —Blenheim Orange—Dessert, 52 votes } 115 votes.
 „ „ Culinary, 63 „ }

These Returns are valuable as showing the extent of appreciation in which certain varieties are held throughout the country. They cannot, however, be altogether accepted as complete lists of the best or most desirable sorts to cultivate in all cases. For example, many excellent varieties of Apples, through being comparatively unknown, are placed much lower in the lists than

their merits otherwise entitle them ; among others, the following may be named, Pearson's Plate, Melon, Grenadier, Lane's Prince Albert, Bramley's Seedling, Frogmore Prolific, Lady Henniker, Golden Spire, Schoolmaster, The Queen, &c., &c.

The most popular Culinary Apple—or that which has received the greatest number of votes (101 of a possible 130)—is Lord Suffield ; King of the Pippins, as a Dessert variety, being second (98). The most popular Dessert Apple in England is Cox's Orange Pippin ; but it is evidently not so well known in or so well suited for the colder climate of Scotland. Blenheim Orange occupies an exceptional position, being selected in every district both as a Dessert and Culinary variety, thus receiving in the aggregate a greater number of votes (115) than any other Apple. With this exception the returns are singularly uniform, the varieties selected as most suitable for the north being also held in the same appreciation in the south. Thus, the varieties of Apples that are really worthy of cultivation may be reduced to comparatively narrow limits.

It may be remarked that the Committee consider many of the Dessert Apples as too small for general use ; and since there are now so many good ones, it would seem useless to cultivate such as Sam Young, Golden Harvey, Lamb Abbey Pearmain, Court of Wick, Redleaf Russet, Guernsey Pippin, Downton Pippin, &c. ; and in regard to Culinary Apples, since so many excellent varieties of large size, &c., are now in cultivation, all those under the standard of "large," *i.e.*, "three inches in diameter," might be with advantage at once discarded, excepting always a few sorts that are specially adapted to certain localities.

APPLES

PART III.

DESCRIPTIVE CATALOGUE

OF

APPLES EXHIBITED 1883 AND 1888.

CLASSIFICATION OF APPLES, AND EXPLANATION OF TERMS USED IN DESCRIBING THE FRUITS.

FIRST.—PURPOSES FOR WHICH GROWN.

- 1.—D. = *Dessert* or Table Use.
- 2.—C. = *Culinary* or Kitchen Use.
- 3.— *Cider.*

SECOND.—SEASON OF RIPENING OR BEING FIT FOR USE.

- 1.—*First Early*.—Fit for use during August and September.
- 2.—*Early*.—Fit for use during September and October.
- 3.—*Mid-season*.—Fit for use from October to January.
- 4.—*Late*.—Fit for use from January to March, &c.

THIRD.—SIZE.—See Plates.

- 1.—*Small*.—Under two inches in diameter.
- 2.—*Medium*.—From two to three inches in diameter.
- 3.—*Large*.—Above three inches in diameter.

FOURTH.—GENERAL FORM OR SHAPE.

- 1.—*Round*.—Globose—Diameter and height about equal.
- 2.—*Oblong*.—Height or length of fruit greater than the diameter.
- 3.—*Flat*.—Oblate—The diameter greater than the height.
- 4.—*Conical*.—Tapering from base to apex.
- 5.—*Ovate*.—Oval—Tapering to both ends.

FIFTH.—SURFACE OF FRUIT.

- 1.—*Angular*.—Ribbed and uneven.
- 2.—*Smooth*.—Even.

SIXTH.—COLOUR.—(Very variable.)

A.—*Normal or Ground Colour*.

- 1.—*Green*.
- 2.—*Yellow*.
- 3.—*Red*.
- 4.—*Bronze*.
- 5.—*Russet*.

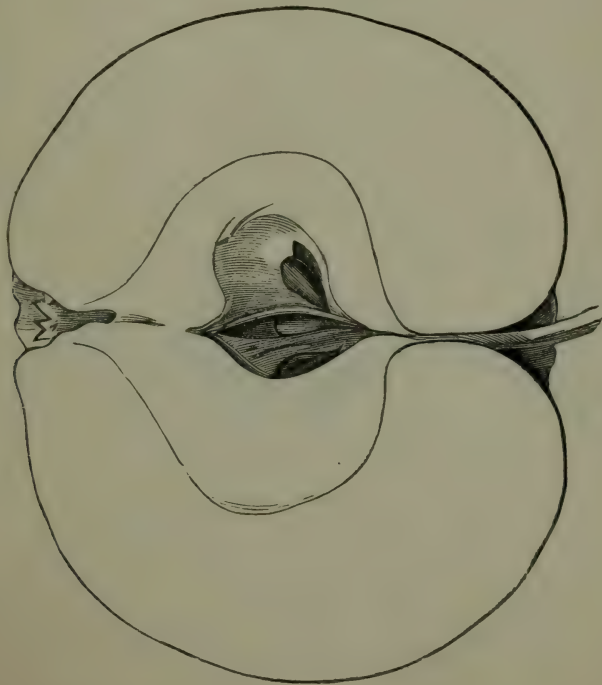
B.—*Supplementary Colours, or Colours chiefly derived from exposure*.

- 1.—*Red-streaked*.
 - 2.—*Red-flushed*.
-

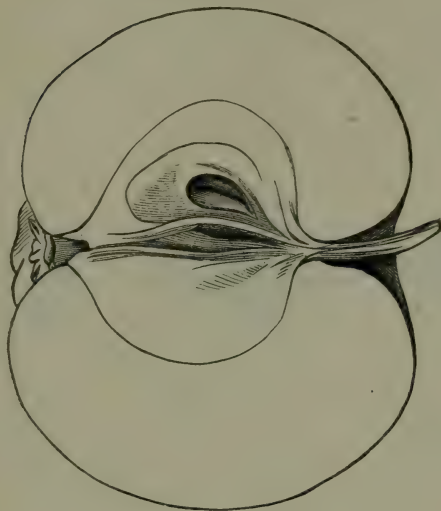
The diagrams or plates are intended to convey, as clearly as may be possible, what is meant by the terms "conical," "oblong," &c., as applied, and the relative gradations of size. Thus an Apple which may be described as "medium, conical" is of the size and form represented in Fig. 2, Plate IV., and so on.

PLATE I.

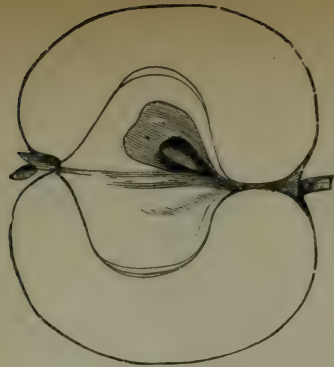
SHAPE:—ROUND. DIAMETER AND HEIGHT ABOUT EQUAL.



Size:—1. Large.



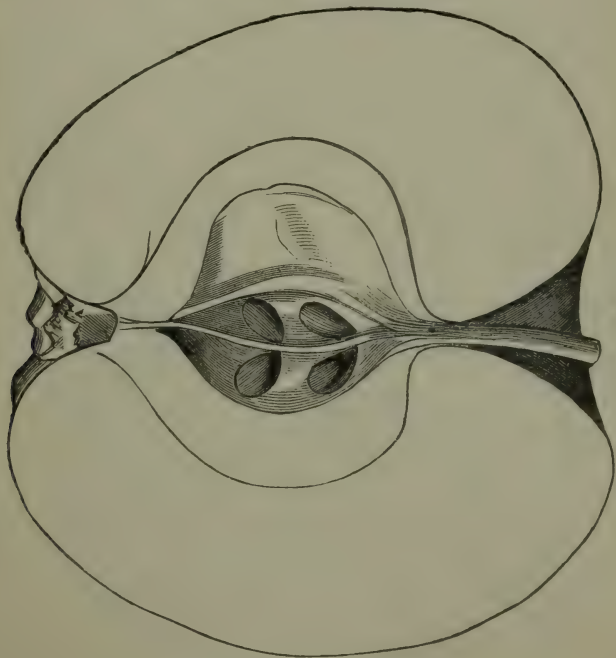
2. Medium.



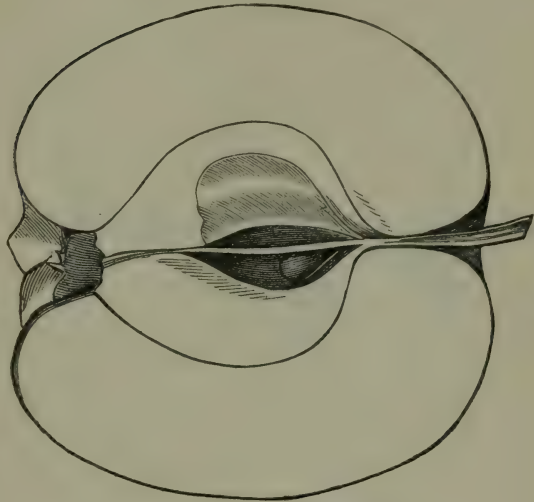
3. Small.

PLATE II.

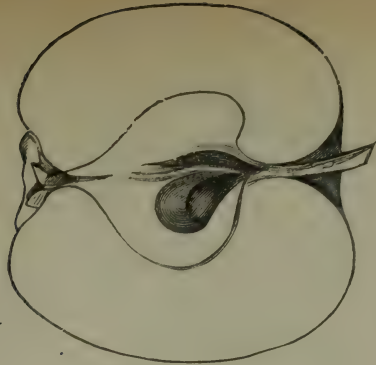
SHAPE :—OBLONG. HEIGHT GREATER THAN DIAMETER.



Size :—1. Large.



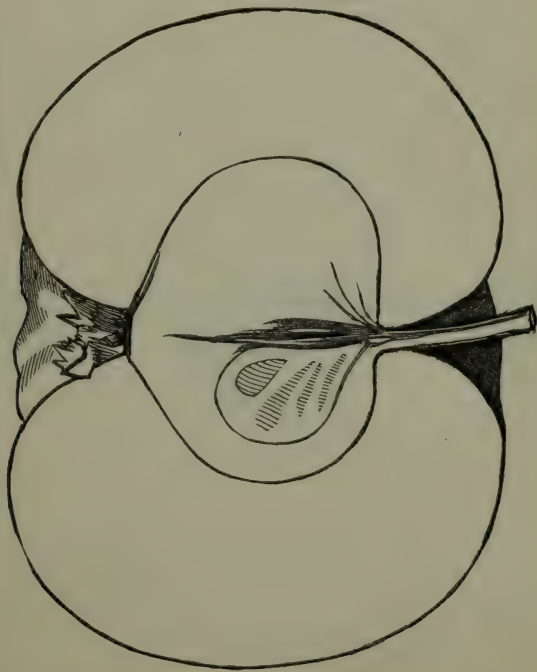
2. Medium.



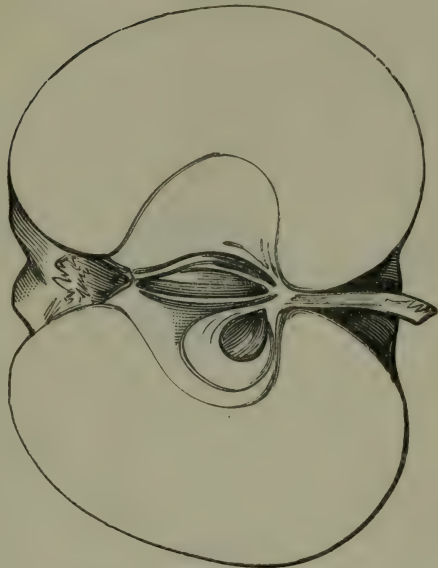
3. Small.

PLATE III.

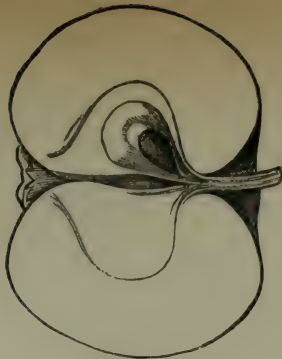
SHAPE :—FLAT. DIAMETER GREATER THAN THE HEIGHT.



Size :—1. Large.



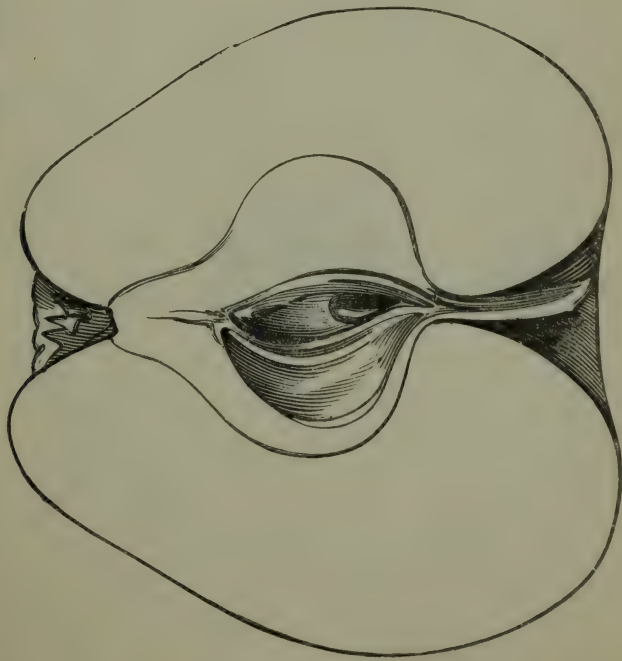
2. Medium.



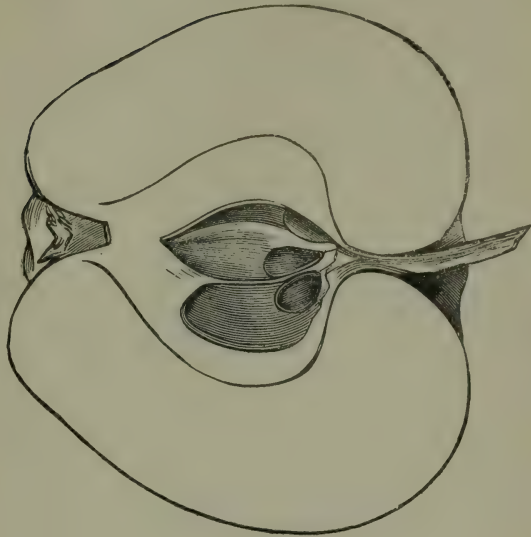
3. Small.

PLATE IV.

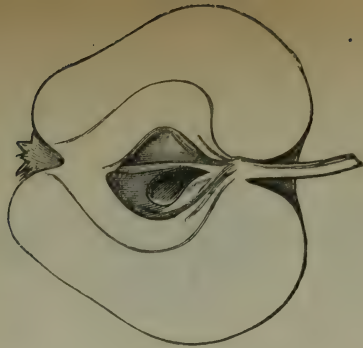
SHAPE :—CONICAL, TAPERING FROM BASE TO APEX.



Size :—1. Large.



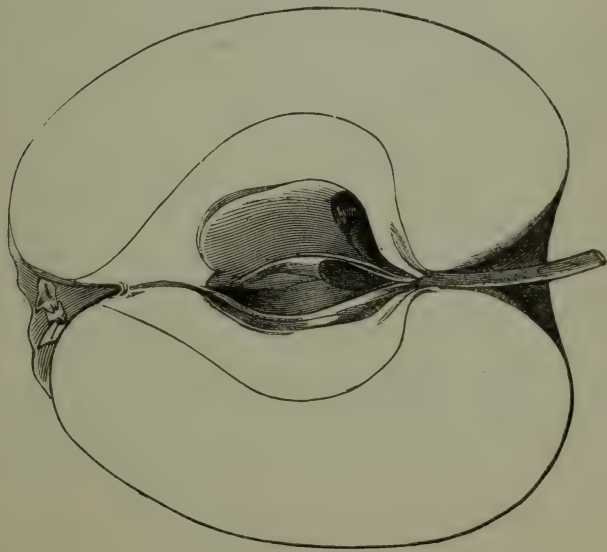
2. Medium.



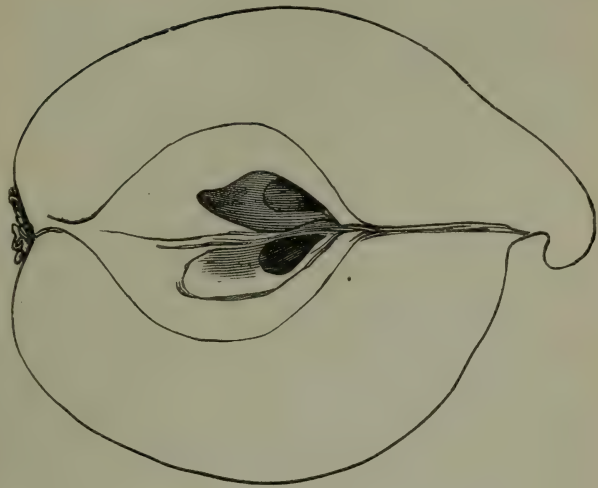
3. Small.

PLATE V.

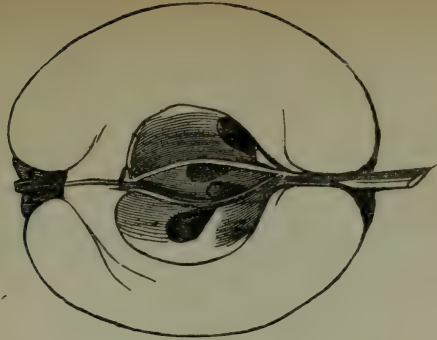
SHAPE:—OVATE. TAPERING TO BOTH ENDS.



Size:—1. Large.



2. Medium.



3. Small.

DESCRIPTIVE CATALOGUE.

N.B.—THE VARIETIES MARKED * WERE EXHIBITED IN 1883 AND ALSO IN 1888.

THE VARIETIES MARKED † ARE NOTICED FOR THE FIRST TIME, NOT HAVING BEEN EXHIBITED IN 1883. THE NAME OF THE EXHIBITOR FOLLOWS THE NAME OF THE FRUIT.

For Abbreviations and Explanation of Terms, see p. 293.

- † **Abbé Sojer** (Peed), Large, flat, angular, deep green, eye large, closed.
- Acklam Russet** (Haywood), see Wheeler's Russet.
- Ackland Vale** (Ford), see Goff.
- Adam's Apple** (Clark), see Egg or White Paradise.
- * **Adams' Pearmain**, D. Medium, conical, greenish yellow, streaked with red and russet, firm, sweet, mid-season, first quality, moderate cropper.
- Adams' Pearmain** (Jefferies), see Winter Striped Pearmain.
- Adams' Reinette** (Brunton), see Adams' Pearmain.
- Admirable**, see Small's Admirable.
- Aitkin's Seedling** (J. Veitch & Sons), see Atkin's Seedling.
- † **Akera** (Bunyard), D. Medium, round, angular, of a uniform dull pink, flesh white, tender, second quality, mid-season.
- Alderton** (Fairbairn), D. Small, conical, green, flushed red, mid-season; worthless.
- Alexander**, see Emperor Alexander.
- * **Alexandra** (Harrison), C. or D. Large, oblong, angular, orange yellow, streaked red with russet, soft, mid-season.
- Alford Prize** (Rivers), see Wyken Pippin.
- * **Alfriston**, C. Large, oblong, angular, green, streaked with russet, very firm, acid, mid-season, first quality, a moderate bearer.
- Algarkirk Seedling** (R.H.S.), D. Small, round, red with pale yellow, firm, sweet, early, second quality; a very pretty apple.
- Allan Bank Seedling** (F. C. Ford), C.

- Allends**, D. or C. Medium, round, angular, flushed bronze, late, third quality.
- Allen's Everlasting** (Rivers), Medium, flat, very angular near the eye, bronzy green, very firm, late, first quality.
- Allman's Scarlet Pippin** (S. Ford), see Rymer.
- † **Alma Pippin** (Wells), Large, conical, even, green flushed, and covered with large spots, giving the fruit a singular appearance, flesh dry, sweet, third quality, mid-season.
- Alms House** (Hathaway), C. Medium, round, yellow, streaked, mid-season; worthless.
- † **Alphington** (R. Veitch), see Tibbett's Pearmain.
- American Apple** (King), C. Medium, flat, green, acid, late; worthless.
- American Baldwin** (Ritchie), C., see Baldwin.
- American Catkin** (Kemp), see Alexandra.
- American Crab** (Paul & Son), C.
- American Early Harvest** (Turner).
- American Golden Reinette**.
- American Golden Russet** (Cummins), D. Small, conical, pale yellow with russet, sweet, mid-season, first quality; resembles Rosemary Russet.
- American Grindling** (Bradley), C. Large, flat, angular, yellow, flushed red, soft, early; resembles Hollandbury.
- * **American Mother**, D. Medium, conical, angular, red, streaked yellow with russet, sweet, briskly flavoured, mid-season, first quality; handsome.
- American Nonesuch** (Jones), D. Medium, round, yellow, sweet, early, second quality.
- American Orange** (R.H.S.), C. Medium, round, pale yellow, mid-season, flesh very white.
- American Peach** (Harding), C. Large, round, red flushed, soft, early; very handsome.
- American Pippin** (Ward), D. Small, conical, greenish russet, mid-season, sweet; worthless.
- American Pippin**, see Yorkshire Beauty.
- American Summering** (Pearson), Cider. Medium, round, angular, streaked yellow, flesh tinged with red.
- American Wothorpe Prolific** (Gilbert).
- Amiens Long Keeper**, see French Crab.
- Andrew's Invincible** (Gilbert), C. Medium, conical, angular, light copper, acid, mid-season; handsome.
- † **Annat Scarlet** (Dunn), resembles Devonshire Quarrenden.
- * **Annie Elizabeth**, C. Large, conical, angular, green, bronze flushed, streaked russet, firm, solid, mid-season, first class; good cropper.
- † **Annie's Kernel** (Brassey).
- Ansell's Cider** (Wheeler), Cider. Small, round, red russet.
- Api Etoillé** (Haycock), D. Small, flat, flushed yellow; pretty.

Api Grosse (Haycock), D. Small, flat, red flushed; very pretty, but worthless; a large variety of the Lady Apple.

Api, or **Pomme d'Api**, D. Very small, red flushed; very pretty and ornamental; great cropper; requires warm season to develop colour.

Api Rose, very similar to Api.

Apple Royal (Saltmarsh), see Sturmer Pippin.

April Pippin (Griffin), D. Small, round, green, acid, mid-season, third class; worthless.

Arbroath Oslin, D., see Oslin.

Arbroath Pippin, see Oslin.

* **Archduc Antoine** (Rivers), very similar to King of the Pippins.

Archerfield Pearmain (Ritchie), see Claygate Pearmain.

Argyll (S. Ford), D. Small, conical, angular, green, flushed red.

Ariadon (Rivers), C. Medium, round, greenish yellow, firm, mid-season.

Arnold's Wothorpe Prolific (Gilbert), C. Large, conical, angular, green, hard, acid, late.

Aromatic (Brunton), see Cornish Aromatic.

Aromatic Russet (Dicksons), D. Small, round, light russet, streaked red, firm, sweet, first quality, stalk long, slender; resembles Ross Nonpareil.

* **Ashmead's Kernel** (Wheeler), D. Small, round, light russet, firm, sweet, first quality; excellent for late or spring use.

Ashridge Pine Apple, see Hambleton Deux Ans.

Astrachan, see Red Astrachan.

* **Atkin's Seedling**, C. Medium, round, greenish yellow, streaked, acid, soft, mid-season.

Atkin's No. 2, see Atkin's Seedling.

* **Autumn Pearmain** (R.H.S.), D. Medium, conical, greenish russet, streaked, early, acid, third quality.

Autumn Pearmain (Garland), C. or Cider. Large, conical, mottled bronzy russet, mid-season.

Ayrshire Court Pendu (Ross), D. Small, ovate, green, streaked red, mid-season; worthless.

Baby Apple (Ritchie), C. or Cider. Medium, oblong, pale green, flushed red, mid-season; worthless.

Bachelor's Seedling (Pollett), D. medium, round, red, sweet, mid-season; very handsome.

Baddow Pippin (Jones), D. Medium, round, greenish russet, sweet, firm, late, first quality.

Badger's Green (Ritchie), C. Large, round, angular, light green, flushed red, mid-season; worthless.

Badger's Whelps, Cider. Medium, round, purplish streaked.

Bailey's Sweet (Rivers), D. or C. Large, round, angular, red streaked, sweet, early, third quality.

- Balchin's Pearmain** (Burnett), D. Medium, conical, angular, streaked yellow, firm, mid-season, second quality.
- Baldwin**, D. or C. Medium, round, angular, bronzy green, late, first quality.
- Balgonie**, see *Ringer*.
- Baltimore**, see *Gloria Mundi*.
- Barcelona Pearmain** (R.H.S.), D. Small, conical, green, russety, with numerous brown spots, mid-season, first quality.
- Barcelona Pippin**, D.
- * **Barchard's Seedling** (R.H.S.), C. Medium, round, greenish yellow, streaked with dark red, firm, mid-season, second quality; a free and constant bearer.
- Bardfield Defiance** (Saltmarsh), see *Waltham Abbey Seedling*.
- Barful Pippin** (Turner), C. Medium, flat, angular, streaked yellow, mid-season, second quality; pretty.
- Barker's Seedling**, see *Warner's King*.
- Barley Pippin** (Rogers), C. Medium, round, red, mid-season, eye large, open.
- Barn Apple** (Ritchie).
- * **Barnack Beauty** (Gilbert), C. or D. Medium, ovate, streaked red, very firm, late, second class; handsome.
- Barndoor** (Rogers), D. Medium, round, red, sweet, early, second quality; a very pretty Apple.
- Baron Ward** (Paul & Son), D. Small, round, green, streaked, late, second class; pretty.
- Barton's Free Bearer** (Pearson), D. or C. Small, round, streaked red, acid, mid-season; worthless.
- Barton's Incomparable** (Veitch), D. Small, conical, greenish yellow, mid-season, second quality; free bearer.
- Barton's Noble** (Hobbs).
- Bascombe Mystery** (R.H.S.), D. Medium, flat, angular, green, late, second class.
- Bath Apple** (Cranston), Cider. Medium, conical, greenish yellow, flushed, firm.
- * **Baumann's Red Winter Reinette** (R.H.S.), C. or D. Medium, flat, red, firm, late, second class; handsome; free bearer.
- † **Baxter's Favourite** (Southall).
- Baxter's Pearmain**, D. or C. Large, oblong, slightly angular, green, tinged with russet and streaked red, acid, mid-season, first quality.
- Bazeley or Lee Apple** (Fowler, J.).
- Beachamwell** (R.H.S.), D. Small, conical, dull green, covered with minute grey spots, very firm, sweet, first quality, mid-season.
- Beat's Pippin** (R.H.S.), D. Small, round, yellow, mid-season, sweet, second quality.

- Beaufinette** (Cummins).
- Beaumaris** (Jones), D. Medium, conical, angular, reddish russet, mid-season, third quality.
- Beautiful Stripes** (Pearson), C. Small, conical, streaked orange, acid, mid-season.
- † **Beauty of Bath** (Cooling), Small, flat, greenish yellow, flushed and streaked, early, sweet, and pleasant; a pretty early Apple, second quality; resembles Jefferson's.
- Beauty of Bath**, C. Large, round, yellow, flushed red, mid-season, first quality; resembles Small's Admirable.
- Beauty of Bedford** (White), D. Medium, round, angular, bronzy green, acid, late; worthless.
- * **Beauty of Hants**, see Blenheim Orange.
- * **Beauty of Kent**, C. Large, round, angular, greenish yellow, streaked, mid-season, first quality; a free and constant bearer.
- * **Beauty of Moray** (Webster), C. Large, round, angular, greenish yellow, mid-season; a favourite Apple in the north of Scotland.
- † **Beauty of Monteith** (Drummond), resembles Lord Suffield.
- * **Beauty of Wallington** (Cummins), C. Medium, round, angular, green, streaked red, firm, acid, late.
- * **Beauty of Waltham** (W. Paul), D. or C. Medium, conical, yellow, streaked red, soft, acid, mid-season; handsome.
- Beauty of Wells**, see Grange Pippin.
- Beauty of Wells** (Pragnell), C. Large, conical, yellow, sweet, mid-season; a very fine Apple.
- * **Beauty of Wilts** (R.H.S.), C. Medium, flat, green, flushed red, mid-season, second quality; somewhat resembles Blenheim Orange.
- Beauty of Wilts**, see Round Winter Nonesuch.
- * **Bedfordshire Foundling**, C. Large, oblong, angular, pale green, flushed with russet, mid-season, first quality; a fine handsome Apple.
- Bell Apple** (Rogers), see Sweet Sheep's Nose.
- Belle Agathe** (Scott), D. Small, flat, angular, green, flushed red, sweet, late; worthless.
- * **Belle Bonne** (Pearson), C. Large, round, greenish yellow, streaked, solid, acid, second quality.
- Belle d'Angers** (Pragnell), D. or C. Medium, flat, angular, pale yellow with russet, flushed red, sweet; worthless.
- Belle de Boskoop** (Rivers), D. Large, round, yellow, streaked, brisk acid, mid-season, first quality; a very pretty Apple.
- **Belle Dubois**, see Gloria Mundi.
- **Bellefleur Brabant**, see Brabant Bellefleur.
- † **Belle Gloire** (Peed), Small, ovate, greenish yellow, late; worthless.

Belle Imperiale, see Imperial.

- * **Belle Joseph** (Bunyard), C. Large, conical, pointed and angular, pale green, flushed, mid-season; somewhat resembles Catshead.

Belle Josephine (Bunyard), C. Large, conical, green, firm, mid-season, eye very large; very handsome.

Belle Mousseuse (J. Scott), D. Small, conical, yellow, flushed, mid-season; worthless.

Belle Norman, Cider.

- † **Belle Pontoise**, Large, flat, green, flushed red, large open eye; handsome.

Bellwood Pippin (McKinnon).

Belmont, see Manks' Codlin.

Ben Joys (Ritchie), Cider. Small, round, red.

Bennet's Defiance, see Fearn's Pippin.

- * **Benoni** (Dunn), D. Small, flat, angular, bronze red, streaked, mid-season; pretty, but worthless.

Benwell's Large, see Pine Apple Russet.

- † **Berkshire Gloire** (Cheal), small, round, green, streaked.

- * **Bess Pool**, D. or C. Medium, conical, angular, green, russety red, streaked, very firm, late, second quality.

- † **Bess Pool Improved** (Frettingham).

Betsey (R.H.S.), D. Small, flat, greenish russet, mid-season, first quality.

- * **Betty Geeson** (Rivers), C. Large, round, flat, pale green, mid-season, eye large, deeply set, first quality.

Bevan's Seedling (Benson), D. or C. Medium, flat, pale yellow with red streaks, early, acid, second quality.

Bidet (J. Scott), D. Small, flat, russet, flushed red, mid-season, third quality; worthless.

Bijou (Rivers), D. Small, round, red, dry and inferior, early.

Billy Berry (Ritchie), C. Medium, conical, pale yellow, flushed red, acid, late; very pretty.

- † **Bishop's Hero** (Gleeson), resembles Lord Suffield.

Bishop's Kernel (Ritchie), C. Small, round, green, flushed red, very acid, late.

Bishop's Thumb (Ward), see Coe's Golden Drop.

Bisingwood Russet, see Byson Wood Russet.

- * **Bismarck** (Bunyard), Large, flat, dark red flushed, eye closed, flesh firm, great cropper, first quality; October.

Bitter Scale (J. Scott), Cider. Small, conical, pale green.

Bitter-sweet (Rogers), Cider. Medium, round, yellow flushed.

Black-a-moor (Poynter), C. Medium, flat, angular, red streaked, mid-season; a very pretty Apple.

Black Apple of Somerset (Cranston), C. Medium, round, bronzy green flushed, sweet, late.

Black Bess (Rowson), C. Small, flat, bronzy green, very acid; worthless.

- Black Bitter-sweet** (Graham), Cider. Small, flat, angular, yellow flushed.
- Black Blenheim**, see Bess Pool.
- Black Colvin** (Ormiston), D. or C. Medium, round, angular, bronze, acid, late; worthless.
- Black Crab** (Miles), C. Small, flat, dark red, acid, late; worthless.
- Black Jack** (Cheal), Cider.
- Black Norman** (Cranston), Cider. Small, round, dark red, flushed.
- Black Norman**, see Barcelona Pearmain.
- Black Prince** (Cranston), Cider. Medium, round, dark red.
- Black Rind** (Haywood), C. Small, ovate, green flushed, acid; worthless.
- Black Taunton** (Cockbill), Cider. Small, round, red-streaked.
- Black Wilding** (Cranston), Cider. Medium, conical angular, red.
- * **Blanders** (Saltmarsh), D. Small, flat, pale yellow, acid, mid-season, third quality; resembles Wyken Pippin.
- Bland's Summer**, see Hollandbury.
- * **Blenheim Orange**, D. or C. Large, flat, occasionally oblong, orange, streaked red, sweet, tender, mid-season, eye large, open; first quality and very handsome, shy bearer on young trees.
- * **Blenheim Pippin**, see Blenheim Orange.
- Blood Red** (Lacaille), D. or C. Medium, round, deep red, soft, mid-season, third quality, flesh tinged with red; very pretty.
- Bloody Ploughman** (Campsie), D. Medium, conical, deep scarlet, very acid, mid-season; handsome, but worthless.
- Blue Pearmain** (R.H.S.) D. or C. Large, round, streaked, dark purple with bluish bloom, sweet but not brisk, second quality; very handsome.
- Bluestone Pippin**, see Hambleton Deux Ans.
- Blushing Bride** (Robertson), C. Large, ovate, angular, pale yellow, flushed, firm, mid-season.
- Bohmer** (R.H.S.) D. Small, round, pale golden, mid-season; worthless.
- Bonbonnier** (Haycock), D. Medium, round, angular, green, flushed, late; worthless.
- Bonrouge**, see Hollandbury.
- * **Borovitsky**, see Duchess of Oldenburg.
- Borsdorffer** (R.H.S.), D. Small, roundish, pale yellow, flushed red, firm, sweet, mid-season, first quality.
- Bosberry** (Ritchie), Cider. Small, round, red streaked.
- Bossom**, see Queen Caroline.
- * **Boston Russet**, C. Medium, conical, angular, greenish russet, slightly flushed, late, first quality.

- Boutigny** (Scott), D. Small, round, yellow, firm, late; worthless.
- Bower Ainton Broadcap** (Scott), Cider. Small, round, yellow, flushed.
- * **Brabant Bellefleur** (R.H.S.), C. Large, oblong, angular, greenish yellow, streaked red, firm, mid-season, often covered with a fine bloom, first quality; handsome.
- * **Braddick's Nonpareil**, D. Medium, flat, slightly angular, green and flushed bronzy russet, very brisk, mid-season, first quality; a great bearer.
- Bradley's Favourite** (Ritchie), Cider. Small, ovate, streaked russet, extremely acid.
- Bradley's Golden Pearmain** (Wheeler), D. Medium, conical or oblong, streaked yellow, mid-season, sweet, second quality; a very pretty Apple.
- Bradley's Golden Pippin**, see Golden Harvey.
- Bradley's Pearmain**, see Claygate Pearmain.
- Bramley's Seedling** (Merryweather), C. Large, flat, angular, green, streaked red, large open eye, firm, acid, late, first quality; a very excellent culinary Apple.
- Bran Rose** (Cranston), Cider. Medium, oblong, mottled red, flesh tinged red.
- Brazier Apple**, see Golden Harvey.
- Brazier's Fame** (Saltmarsh), D. Small, conical, yellow streaked with russet, very acid, mid-season; worthless.
- * **Brickley Seedling** (R.H.S.), D. Small, round, bronzy-green streaked, firm, sweet, late, second quality.
- Bridgewater Pippin** (Turner), D. or C. Medium, round, greenish yellow, early; worthless.
- Brietling** (Cummins), D. or C. Medium, even, green, sweet, mid-season; worthless.
- Bringewood Pippin** (Stacey), D. Small, conical, golden, very firm, late, second quality; resembles Yellow Ingestrie, but later.
- Bringewood Pippin** (Turner), C. medium, conical, even, pale green flushed, acid, mid-season; a very pretty and distinct Apple.
- Bristol Apple** (Brymer), small, round, green, Nonpareil class.
- Broad Eyed Pippin** (Cockbill), C. Small, flat, with broad open eye, red streaked, mid-season; pretty.
- Broad Eyed Pippin** (Garland), Cider. Medium, conical, green.
- Broad Eyes** (Cheal), C. or Cider. Medium, flat, very angular, red streaked, mid-season.
- Broad Nosed Pippin** (Warden).
- Broad Tail** (Cranston), Cider. Medium, round, with broad base, flushed yellow.

- Bröckhead Seedling** (Poynter), D. or C. Medium, round, streaked yellow, brisk, mid-season.
- Bromley** (Cranston), Cider. Medium, flat, red streaked.
- Broughton Pippin** (Cummins), D. Small, round, red streaked, mid-season; worthless.
- Brown Cockle's Pippin**, see *Cockle's Pippin*.
- Brown Eyes** (Poynter), D. Small, conical, green russet, sweet, mid-season; worthless.
- Brown's Caroline** (Saunders), see *Summer Strawberry*.
- * **Brown's Codlin** (Veitch), D. or C. Small, conical, bronzy green, flushed; worthless.
- Brown's Codlin**, see *Queen Caroline*.
- Brown's Imperial Russet** (R.H.S.), see *Mononisten Reinette*.
- Brown's Pippin**, see *Claygate Pearmain*.
- Brown's Queen Caroline**, see *Queen Caroline*.
- Brown's Seedling**, see *Queen Caroline*.
- * **Brownlee's Russet** (R.H.S.), D. Medium, round, uniform light russet, firm, mid-season.
- Brunswick Codlin** (Cockbill), C. Large, conical, even, pale green flushed bronze, dry flesh, mid-season, second quality; a very handsome Apple.
- * **Buckingham** (Rivers), D. or C. Medium, oblong, green, streaked, mid-season, second quality; a very handsome Apple.
- Buff** (Scott), Cider. Small, conical, dark green, streaked.
- Bullet Pearmain** (Ritchie), D. Medium, conical, greenish russet, mid-season; worthless;
- Bull's Golden Reinette** (Saltmarsh), D. Medium, oblong, large open eye, greenish, streaked, mid-season, first quality; very handsome.
- Bulster Hill** (Lacaille), C. Small, flat, angular, flushed red, soft, early; worthless.
- * **Burchardt's Reinette** (R.H.S.), D. Medium, flat, pale yellow, netted with russet, acid, mid-season, second quality.
- Burchardt's Seedling**, see *Burchardt's Reinette*.
- Bures Sweet**, Cider. Medium, flat, green.
- Burford Red** (Cranston), C. Medium, flat, dark red, streaked, acid, late; a handsome Apple.
- Burgin** (Pearson), C. or D. Small, conical, pale yellow, flushed, acid, late; worthless.
- Burn Apple**, Cider. Small, round, green.
- Burr Knot** (Cranston), C. Medium, round, angular, green, flushed bronze, acid, mid-season.
- Butcherin**, Cider. Medium, conical, angular, deep red, streaked, early, flesh streaked red.
- Byson Wood Russet** (R.H.S.), D. Small, flat, greenish russet, late, second quality, long stalk.

- Cabbage Apple** (Rogers), D. small, flat, streaked yellow; worthless.
- Cadbury**, see **Winter Fullwood**.
- Calander** (Pragnell), C. Medium, round, flushed yellow, soft, acid, yellow; worthless.
- Calcot's Seedling** (Turner), D. or C. Medium, flat, red streaked, mid-season; resembles **Nonesuch**.
- * **Caldwell**, see **Rymer**.
- Calf'shead**, C.
- Calville**, C. Small, ovate, streaked red, late; worthless.
- Calville Blanche**, D. or C. Large, flat, angular, greenish white, flesh very tender, sweet; requires to be grown on walls or under glass; first quality.
- Calville Blanche d'Hiver**, see **Calville Blanche**.
- * **Calville Boisbunel** (Veitch), D. or C. Large, round, streaked, bronzy green, sweet, mid-season, first quality.
- Calville du Dantzig** (Veitch), D. Small, round angular, red, sweet, early, second quality.
- Calville du Haire** (Veitch), see **London Pippin**.
- Calville Garibaldi** (Veitch), C. Medium, flat, green, soft, sweet, mid-season, second quality.
- Calville Gloire de Doué** (Scott), D. Small, round, bronze; worthless.
- * **Calville Malingre** (Haycock), C. or D. Large, round, pale bronze, red streaked, very firm, late, first quality; a very handsome and distinct Apple.
- Calville Pippin** (King), D. Small, flat, red; worthless.
- Calville Rouge** (Dunn), C. Large, roundish angular, streaked and spotted with bright red, soft, early, flesh tinged red; very handsome.
- Calville Rouge d'Automne** (Dunn), C. or Cider. Large, conical, angular, dark purplish red, soft, mid-season, flesh deeply tinged red.
- Calville Rouge d'Hiver** (Moorhouse), C. Large, oblong, angular, deep red, late, flesh tinged red.
- * **Calville Rouge Précoce** (R.H.S.), D. Medium, round, red, beautifully spotted throughout, sweet, early, second quality; a very handsome Apple.
- * **Calville St. Sauveur**, C. Large, conical, angular, pale green, flushed, mid-season, cooks well, first quality.
- Calville Vineux** (Rivers), D. or C. Medium, oblong, angular, pale yellow, sweet, firm, mid-season, first quality.
- Cambridge Pippin** (Rivers), C. Large, oblong, angular, pale green, mid-season, first quality.
- * **Cambusnethan Pippin** (Dunn), D. or C. Medium, flat, large open eye, streaked yellow, sweet, early; a favourite Scotch Apple.
- Canada Red** (Mundell), C. Small, round, angular, bronzy green, firm, late.

- Canterbury**, see Mabbott's Pearmain.
- Cap of Liberty**, Cider. Small, round, red, streaked.
- * **Caraway Russet** (Lee), D. Small, flat, light russet, large open eye, late, first quality.
- * **Cardinal** (Cheal), D. Small, round, streaked yellow; worthless.
- † **Cardross** (Drummond), green.
- Carel's Seedling**, C.
- * **Carlisle Codlin** (R.H.S.), C. Medium, oblong, angular, greenish yellow, flushed, very acid, mid-season; an excellent culinary Apple.
- † **Carlton Seedling** (Divers), Large, flat, pale green; resembles Warner's King; mid-season, first quality.
- Carnation** (R.H.S.), D. Medium, round, green, streaked, acid, late, third quality.
- Caroline**, C.
- * **Carse o' Gowrie** (King), C. Large, flat, angular, pale green, flushed, firm, acid, late; resembles Tower of Glamis.
- Castle Leno Pippin**, see Red Astrachan.
- * **Castle Major** (Goldsmith), C. Very large, round, angular, pale yellow, flushed red, late; very handsome.
- * **Catshead**, C. Very large; oblong, angular, deep green, flushed, firm, acid, mid-season; an excellent culinary Apple, moderate bearer.
- Catshead** (Garland), Cider. Large, conical, angular, yellow, streaked.
- * **Cellini**, C. Large, conical, even, greenish yellow, streaked, soft, acid, early, first quality, eye large, open; handsome, great cropper.
- Chancellor** (Neighbour), C. Medium, round, green, streaked, acid, soft; worthless.
- Chapel, or Fullwood** (Graham), D. Small, round, bronzy green; worthless.
- Charleston Pippin**, resembles Irish Peach.
- Chaze** (Scott), D. Small, round, light russet, sweet, mid-season; worthless.
- Cheat Boys**, Cider. Small, conical, angular, red, streaked.
- Chelston Pie Maker** (Poynter), C. Medium, ovate, yellow streaked, firm, mid-season, brisk flavour.
- Chelston Pippin**, Cider. Medium, round, yellow.
- Chelston Long Keeper**, see Red Winter Pearmain.
- Cherry Norman**, Cider. Medium, round, bright red, streaked, acid, soft; worthless.
- Cherry Orchard**, see Norfolk Paradise.
- Cherry Pearmain**, D. or C. Medium, round, red, streaked, sweet, mid-season; worthless.
- * **Cheshunt Pippin** (Rivers), D. or C. Medium, flat, red streaked, large open eye, soft, mid-season, second quality, handsome.

Chester Pearmain (Scott).

Chester Pippin (Griffin), C. Medium, flat, angular, light copper, streaked, firm, acid, late; very pretty and distinct.

Child's Perfection.

Chisel Jersey (Scott), see Jersey Chisel.

Christie's Pippin (Wheeler), D. Small, flat, greenish yellow, russety, brisk acid, firm, mid-season, first quality.

Christie's Russet.

Christie's Woodstock Pippin (Ford), D. or C. Large, conical, angular, streaked yellow, firm, acid, mid-season, first quality.

Cider House Russet, C. Small, flat, light russet, late, second quality.

Clark's Pippin, see Downton Nonpareil.

Clark's Pippin (J. Dean), D. Small, flat, yellow, acid; worthless.

Clarke's Peason (Saltmarsh), D. Small, round, streaked red, early; worthless.

Clarke's Pippin (Bunyard), D. Small, flat, greenish russet open eye, sweet, mid-season.

† **Clarke's Seedling** (Merryweather), C. Medium, flat, deep green, flushed, large eye, hard, late.

Clary Pippin (Saltmarsh), D. Small, round, green, russety, sweet, late, second quality.

Claudius Früher Spitz Apfel (R.H.S.), D. or C. Medium, round angular, greenish yellow, very sweet, early.

* **Claygate Pearmain**, D. Medium, conical, greenish russet, streaked, mid-season, first quality; resembles the Ribston Pippin in flavour; free bearer.

Cliff Pippin (Pearson), C. Medium, round, green, dry, acid; worthless.

Cliffey Seedling (Cranston), D. Small, round, red, sweet, early, third quality; somewhat resembles Fearn's Pippin.

Clifton Nonesuch, see Old Nonesuch.

Clove Pippin (Cummins) D. or C. Large, long, conical, greenish yellow, mid-season, second quality.

* **Cluster Golden Pippin** (Rivers), D. Small, round, greenish yellow, acid, mid-season, third quality; some of the fruit are produced with double crowns, or in united pairs, hence the name.

Cluster Pippin, see Cluster Golden Pippin.

Coalbrook, Cider. Large, flat, red streaked; resembles Tom Putt.

Coalbrook or Marrow Bone, see Tom Putt.

* **Cobbett's Fall Pippin**, see Warner's King.

Cobham, see Golden Ducat.

* **Cockle's Pippin**, D. Medium, ovate, pale green, freckled with

russet, mid-season, first quality ; a very excellent Sussex Dessert Apple.

Cockpit (Slater), C. Small, ovate, angular, pale green, slightly flushed, brisk acid, late ; a very favourite sauce Apple in Yorkshire ; certain cropper.

Cock's Seedling (R.H.S.), D. or C. Medium, round, green, flushed, mid-season, third quality, stalk very long.

Coe's Golden Drop (R.H.S.), D. Small, conical, green, firm, sweet, late, first quality.

Cogswell (R.H.S.), early, second quality.

Colonel Harbord.

* **Colonel Vaughan**, D. or C. Small, ovate, angular, red, flushed and streaked, acid, early, third quality ; a pretty, free-bearing Apple.

Comey, Cider. Small, conical, greenish yellow, flushed.

Constanzer (R.H.S.), D. Small, flat, yellow, flushed with russet, very firm, sweet, late ; worthless.

Contor, see Dutch Mignonne.

Contor, D. Small, round, greenish yellow, acid, late ; worthless.

Convent Nonpareil (Poynter), D. Medium, round, greenish russet ; worthless.

Coole's Seedling (J. Veitch & Sons), D. Small, round, yellow streaked, sweet, mid-season, first quality.

Cooper's Ambition (Gilbert), D. Medium, conical, angular, pale yellow streaked, sweet, mid-season ; a very pretty Apple.

Cooper's Favourite.

Copmanthorpe Crab, see Dutch Mignonne.

Copmanthorpe Russet.

Cornish Apple (Griffin), C. Small, ovate, yellow, first early.

* **Cornish Aromatic** (R.H.S.), D. Medium, round, angular, streaked russet, sweet, mid-season, second quality.

Cornish Crab, C. Large, ovate, green, very acid.

* **Cornish Gilliflower** (Haycock), D. Medium, ovate, angular, greenish yellow, streaked russet, firm, sweet, mid-season ; very highly flavoured, shy bearer.

Coronation Pippin (Ford), see Grange's Pearmain.

† **Cortes** (Dunn), Small, ovate, green flushed red ; a pretty Apple.

Costard (Cranston Nursery Company), C. Very large, oblong, green, soft, early ; a fine culinary Apple.

Costard (Jefferies & Son), C. Small, conical, tapering, angular, yellow, streaked, acid, mid-season, third quality.

Counsellor, see Yorkshire Beauty.

Counter Pippin (Cummins), D. Small, ovate, green ; worthless.

Countess Howe (Harrison & Sons), D. Medium, round, angular, red, sweet, early, second quality.

* **Court Pendu Plat** (R.H.S.), D. Medium, flat, with open eye,

greenish russet, streaked red, very firm, sweet, late, first quality ; late flowering, good cropper.

- * **Court of Wick**, D. Small, oblong or conical, pale yellow, streaked red with russet, firm, sweet, mid-season, first quality ; a very excellent Apple.

Court of Victoria.

- * **Cox's Orange Pippin** (R.H.S.), D. Medium, round, greenish yellow, streaked red and russety, tender, sweet, rich, and excellent, mid-season, first quality.

- * **Cox's Pomona** (R.H.S.), C. or D. Large, flat, angular, pale green, red flushed and streaked, very beautiful, tender, brisk acid, mid-season, first quality, moderate cropper.

Cox's Redleaf Russet (J. Veitch & Sons), D. Small, round, russet, flesh green, sweet, late, first quality.

Cowan's Quoining (Griffin), Cider. Medium, ovate, angular, streaked yellow.

Cowan's Victoria (Cheal), D. Small, round, red streaked, soft, early ; worthless ; resembling in appearance Forge.

Cowarne Red, Cider. Small, round, bright red streaked, very pretty.

Crackling Pippin, see Golden Reinette.

Crackling Pippin, Cider. Medium, round, red streaked ; somewhat resembles Tom Putt.

Cranston's Seedling (Cranston Nursery Co.), C. Medium, round, green, flushed red, late.

Creech Pearmain (Poynter), see Sturmer Pippin.

Crimson Caraway Russet (Griffin), D. Small, flat, angular, large open eye, reddish russet, mid-season, flesh tinged red ; in appearance like Trumpington.

- † **Crimson Costard** (Watkins).

- * **Crimson Queen**.

Crimson Quoining (Turner), C. or Cider. Medium, conical, angular, deep red, sweet, mid-season ; very pretty.

Croft Angry, see Dutch Mignonne.

Crofton (Paul & Son), D. Small, flat, light russet, brisk, mid-season, first quality.

Crofton Pippin, see Scarlet Crofton.

Crofton, Scarlet, see Scarlet Crofton.

Croisette (Benson), C. Medium, round, red, mid-season, third quality ; handsome.

Crockstalk, Cider. Small, conical, green russet ; stalk terminating in a fleshy curled knob.

- * **Crown Apple** (Cranston Nursery Co.), C. Medium, conical, red streaked, firm, acid, mid-season.

Crump, Cider. Medium, round, red streaked.

Crystal Palace (Pearson), C. Large, flat, angular, very pale green, acid, mid-season, flesh very white.

Crystal Pippin (King), D. Small, flat, red streaked, mid-season, inferior.

- Cullen** (Lane & Son), C. Large, round, angular, green, late, first quality; good culinary.
- Culver Russet** (Scott), see **Syke House Russet**.
- Cumberland Favourite**, see **Yorkshire Beauty**.
- * **Curltail** (Cheal), C. Medium, round and ovate, angular, pale green, mid-season, second quality; stalk inserted in a peculiar curled fleshy knob.
- Curry Codlin** (Poynter), C. Very large, conical, angular, flushed red, soft, dry flesh, early; resembles **Hollandbury**.
- Custard Apple** (Fairgrieve), C. Small, long conical, pale green, early; worthless.
- D. T. Fish**, see **Warner's King**.
- Dacre** (Crossland), C. Medium, oblong, angular, green, flushed red, acid, very late.
- Dalton's Exquisite** (Gilbert), D. Medium, conical, angular, streaked yellow, sweet, mid-season, first quality.
- Dalzell Manse Codlin**, C. Medium, long, tapering, angular, flushed.
- Danvers' Bitter-sweet**, Cider. Medium, flat, greenish, red streaked, late; worthless.
- Danvers' Winter Sweet** (Turner).
- D'Arcy Spice** (Saltmarsh), see **Baddow Pippin**.
- Darlington**, D. Small, round, pale green; worthless.
- † **Dartmouth Crab**, see **Hyslop Crab**.
- Dean's Codlin** (Haycock), see **Pott's Seedling**.
- Debtsling Pippin** (Killick), D. Medium, conical, streaked golden russet, flesh soft, acid, early, third quality.
- D'Eclat**, see **Scorpion**.
- Dedham Russet** (Ward), D. Medium, ovate, greenish russet, mid-season, second quality.
- Deepdene Pearmain** (Matthews), see **Claygate Pearmain**.
- Deitzer's Gold Reinette** (R.H.S.), D. Small, round, yellow, sweet, early, first quality.
- Derbyshire Crab** (R.H.S.), C. Medium, ovate, pale green, acid; worthless.
- Deux Ans** (R.H.S.), D. or C. Small, conical, angular, green, flushed dull brown, very hard, firm, acid, late; worthless.
- Deux Ans Hambledon**, see **Hambledon Deux Ans**.
- Devonshire**, Cider. Large, round, streaked yellow, early.
- Devonshire Bitter-sweet**, Cider. Medium, flat, angular, green, late.
- Devonshire Buckland** (R.H.S.), D. or C. Medium, flat, wide eye, very pale green, nearly white, firm, solid, late, second quality.
- Devonshire Court Pendu**.
- Devonshire Nine Square**, resembles **Tom Putt**.
- * **Devonshire Quarrenden** (R.H.S.), D. Small, flat, dark red, early, second quality, great bearer.

- * **Devonshire Queen** (Jefferies), C. or Cider. Large, round, red streaked, early ; a very handsome Apple.
- Devonshire Red**, Cider. Medium, round, angular, dark red.
- Devonshire Striped** (Cockbill), C. Medium, conical, russet, streaked red, dry, mid-season.
- Dicksey's Greening**, C. Small, conical, greenish yellow, firm, acid, late ; worthless.
- Doctor**, see **Ringer**.
- * **Doctor Harvey** (J. Veitch & Sons), C. or D. Large, round, pale yellow, soft, sweet, tender, mid-season, first quality ; greatly resembling in appearance **Waltham Abbey Seedling**.
- * **Doctor Hogg** (Ford), C. Large, long conical, angular, pale green, firm, mid-season, second quality.
- Dog's Snout** (Crossland), D. or C. Small, conical, pale yellow, flushed bronze, mid-season ; worthless.
- Dolphine** (King), resembles **Norfolk Storing**.
- Domine** (Scott), C. Medium, conical, greenish yellow, very acid, mid-season ; worthless.
- * **Domino** (Bradley), C. Large, oblong, angular, greenish yellow, flushed red, soft, early ; a fine, early **Codlin** ; first quality.
- Donabety**, see **Kerry Pippin**.
- Doncaster Pearmain**, see **Claygate Pearmain**.
- Doonside** (Dunn), C. Small, round, angular, green, streaked, acid, mid-season.
- Dorchester**, C. Medium, conical, green, streaked, late ; worthless.
- † **Doux Argent**, Medium, flat, pale green, flushed, late.
- Doveton Seedling** (R. Veitch & Son), D. Medium, round, yellow, streaked, early ; worthless.
- Downe's Jersey**, D. Small, conical, streaked yellow, russet ; worthless.
- Downton**, see **Downton Pippin**.
- Downton Nonpareil** (R.H.S.), D. Small, flat, green with russet, firm, brisk acid, late, first quality.
- * **Downton Pippin** (R.H.S.), D. Small, conical, greenish yellow, brisk acid, mid-season, second quality ; a great bearer.
- Drap d'Or** (Lee & Son), D. Small, round, pale yellow, early, second quality, long stalk.
- Draper's Pippin** (Ward), Small, round, even green ; worthless.
- * **Dredge's Emperor** (Griffin), C. Small, round, yellow, streaked, mid-season, flesh very white.
- Dredge's Fame** (W. Paul & Son), C. Large, flat, greenish yellow, streaked, briskly acid, late, first quality.
- * **Dredge's Fame**, resembles **Blenheim Orange**.
- Drilly Pippin** (King), D. Small, round, yellow, early ; worthless.

- Drumlanrig Castle**, see Warner's King.
- Duchess** (Grey), C. Medium, round, angular, green, soft, acid, mid-season ; worthless.
- Duchess of Glo'ster**, see Duchess's Favourite.
- * **Duchess of Oldenburg** (R.H.S.), D. Medium, round, yellow, streaked red, brisk acid, early, first quality ; great bearer.
- * **Duchess of York** (Thompson), see Duchess's Favourite.
- Duchess's Favourite** (Killick), D. Small, round, red, early, flesh white tinged red ; a fine early Apple, great bearer.
- Duck's Bill** (S. Ford), C. Medium, conical, bronzy-red with russet, firm, acid, late, second quality ; a pretty Apple, great cropper.
- Ducket**, see Golden Ducat.
- Duhalder** (Paul & Son), C. Medium, conical, angular, green, late.
- * **Duke of Beaufort** (R.H.S.), C. Large, flat, angular, dark green, streaked red, firm, acid, late.
- Duke of Devon** (Grey), see Red Astrachan.
- * **Duke of Devonshire** (Lane), D. Medium, round, flat, greenish russet, firm, sweet, first quality, mid-season.
- * **Duke of Glo'ster** (Gilbert), C. Medium, flat, green, firm, acid, late, first quality.
- Duke of Glo'ster** (R.H.S.), D. Medium, oblong, streaked yellow, acid, mid-season ; resembles King of the Pippins.
- Duke of Wellington**, see Dumelow's Seedling.
- Duke William** (Crossland), D. Medium, round, yellow, acid, early ; worthless.
- * **Dumelow's Seedling**, C. Large, round, clear pale green, occasionally flushed, firm, very acid, late, large open eye, first quality.
- Dumpling Apple** (Rogers), C. Medium, roundish, green, mid-season.
- Dumpling Apple**, C. or Cider. Large, round, green, flushed.
- Duncombe's Seedling** (Gilbert), D. or C. Small, conical, pale green, mid-season.
- Dundee** (R.H.S.), D. Small, flat, light russet, dry, mid-season first quality.
- † **Dunmore** (Drummond), Medium, oblong, angular.
- Dunmore Pearmain**, see Yorkshire Beauty.
- Dunning's Russet** (Poynter), D. or C. Large, round, streaked yellow, soft, early, inferior.
- Dunster Bitter-sweet**, Cider. Large, round, angular, greenish yellow.
- Dunster Cider**, Cider.
- Dunster Codlin** (Poynter), see Tower of Glamis.
- * **Dutch Codlin**, see Royal Codlin.
- * **Dutch Fullwood** (Lee & Son), C. Medium, oblong, greenish yellow, flushed, firm, sweet, mid-season.

- Dutch Kernel**, C. or Cider. Large, round, angular, streaked yellow, early.
- * **Dutch Mignonne**, D. or C. Medium, round, green russety, streaked, very firm, late, long stalk, second quality; a great bearer.
- Dyer** (R.H.S.), C. Medium, round, pale yellow, soft, mid-season; worthless.
- Early Apple**, see Irish Peach.
- Early Cob** (Griffin).
- Early Cooker** (Poynter), C. Medium, round, flattened, very pale green, sweet, dry, first early.
- Early Harvest** (Pearson), D. Small, round, pale green, sweet, first early, first quality.
- Early Joe** (Clark), D. Very small, conical, red, pretty, like a Crab, first early.
- Early Joe**, see Duchess of Oldenburg.
- Early Julien**, C. Small, flat, angular, pale green, very acid, first early, second quality; great bearer.
- Early June**, see Early Julien.
- Early Kent**.
- Early Margaret** (Clark), D. Small, conical, red streaked, sweet, soft, first early; a nice early Apple.
- * **Early Nonpareil**, see Hicks' Fancy.
- Early Nonesuch**, see Nonesuch.
- Early Pippin** (Ritchie).
- Early Strawberry** (Cranston Nursery Company), D. or C. Medium, conical, angular, flushed red, second quality, first early.
- Early Yellow**, see Yellow Ingestrie.
- East Lothian Pippin** (Brunton), C. Medium, round, flattened, pale yellow, soft, early.
- East Lothian Seedling** (Brotherston), see East Lothian Pippin.
- Easter Pippin**, see French Crab.
- Ebner's Tapt Apfel**, D. Small, round, pale yellow, mid-season; worthless.
- Eccleston Pippin** (Selwood), D. or C. Medium, round, angular, bronze green, soft, mid-season.
- Ecklinville**, see Ecklinville Seedling.
- Ecklinville Pippin**, see Ecklinville Seedling.
- * **Ecklinville Seedling**, C. Large, flat, angular, pale straw, soft, early, first quality; great and constant cropper.
- Ede's Beauty** (Cheal), D. Large, round, streaked yellow, sweet, soft, early, second quality; pretty.
- Edging** (Goldsmith), C. Small, conical, angular, green, mid-season; worthless.
- Edinburgh Cluster** (R.H.S.), D. or C. Medium, roundish, pale straw, mid-season, first quality.

- Edmund Jupp** (S. Ford), C. Medium, conical, yellow, acid, soft, early, second quality.
- * **Egg Apple** (King), see Egg or White Paradise.
- Egg or White Paradise** (Dunn), D. Small, ovate, greenish yellow, streaked, firm, mid-season, second quality ; a great bearer.
- * **Egremont Russet** (Pragnell), D. Small, round, flattened, large open eye, light russet, mid-season, first quality.
- Eldon Pippin** (J. Veitch & Sons), D. Medium, flat, orange yellow, streaked, sweet, mid-season, first quality.
- * **Eldon Pippin** (R.H.S.), see Drap d'Or.
- Elford Golden Pippin** (Cummins), D. Small, round, greenish yellow, firm, mid-season, third quality.
- Elletson's Pine Apple** (Saunders), C. Medium, flat, greenish yellow, flushed, soft ; worthless.
- Ellis's Bitter** (Garland), Cider. Small, round, green, streaked.
- Elsinore** (Cummins), D. or C. Medium, conical, pale yellow, mid-season ; a very pretty Apple.
- Elton Pippin** (Ward).
- Emberson's Apple** (Warner), see Waltham Abbey Seedling.
- * **Emperor Alexander** (R.H.S.), C. Large, conical, greenish yellow, streaked red, soft, acid, mid-season, second quality ; extremely handsome.
- Emperor Napoleon** (F. C. Ford), C. Medium, flat, green, acid, mid-season ; worthless.
- Empress Eugenie** (J. Scott), see Claygate Pearmain.
- Empress of Russia** (R.H.S.), D. or C. Medium, flat, angular, yellow, flushed red, sweet, early, very long stalk, second quality.
- Enamel**, C. Medium, round, green streaked.
- Englische Winter Gold Pearmain**, see King of the Pippins.
- English Codlin** (Jefferies), see Old English Codlin.
- English König Pearmain** (R.H.S.), C. Medium, round, angular, streaked, green, very acid, mid-season, second quality.
- English Orange** (Ritchie), D. small, flat, flushed russet, early, third quality.
- English Pitcher** (King), see Manks' Codlin.
- English Red Lemon Reinette** (R.H.S.), D. Medium, conical, angular, greenish yellow, streaked, mid-season ; resembles King of the Pippins.
- Esopus Spitzenberg** (Lane), D. Small, flat, angular, flushed russet, firm, sweet, late, second quality.
- Essex Pippin** (Rivers), D. Medium, conical, angular, yellow flushed, mid-season ; worthless.
- Essex Spice**, (Burnett), see Ribston Pippin.
- * **Evagil** (R.H.S.), D. Small, flat, pale yellow, brisk acid, mid-season, third quality ; handsome.
- Evagil Pippin** (Lane), see Evagil.

- * **Eve**, see Mank's Codlin.
- Eve Apple**, see Trumpington.
- Even Pearmain**.
- Evenden** (Langridge), C. Medium, round, angular, bronze green, very acid, late.
- Everbearing** (Poynter), see Keswick Codlin.
- Exhibition** (Rivers), C. Medium, round, angular, yellow, streaked, firm, mid-season.
- Exhibition Banks** (J. Scott), D. Small, flat, yellow, flushed sweet, late; worthless.
- Fail me Never** (Jefferies), C. Large, round, very angular, pale yellow, soft, dry, early; worthless.
- Fail me Never**, D. or C. Medium, conical, yellow, early; third quality.
- Fail me Never**, see Benoni.
- Fair Maid**, resembles Keswick Codlin.
- Fair Maid of France** (Kidd), D. or C. Medium, round, red streaked, acid, first early; third quality.
- Fair Maid of Kent** (R.H.S.), C. Large, round, green, flushed and streaked, soft, mid-season; somewhat resembles Beauty of Kent.
- Fair Maid of Taunton** (Poynter), C. Medium, flat, angular, pale green, flushed, acid, late.
- Fair Maid of Taunton**, see Dumelow's Seedling.
- Fair Maid of Windsor** (J. Scott), D. Small, round, yellow, streaked, very sweet, early, second quality.
- Fairy** (Pearson), D. Very small, round, pale yellow, flushed red; very pretty, a sort of Crab.
- Fairy Apple**, see Fairy.
- Fall Harvey** (Cummins), C. Large, round, angular, green, sweet, soft; handsome.
- * **Fall Pippin** (Haycock), C. Medium, oblong, angular, dark red, streaked, mawkish sweet; worthless.
- Fallwater** (R.H.S.), C. Medium, round, angular, green, sweet, dry, mid-season.
- Fall Wine** (J. Scott), C. or Cider. Small, flat, red streaked; worthless.
- Fameuse**, see Pomme de Neige.
- Farleigh Pippin** (G. Bunyard & Co.), D. Medium, conical, ovate, greenish yellow, red streaked, very firm, mid-season; great cropper; second quality, a handsome Apple.
- Farmer's Glory** (Thomas), C. Medium, round, green, flushed copper colour, acid, mid-season.
- Fat Ox**, see Royal Codlin.
- Fearn's Apple**, see Cox's Pomona.
- * **Fearn's Pippin**, D. Small, flat, greenish yellow, red streaked, brisk, firm, mid-season; first quality; a very pretty Apple, good cropper.

- Fearnought** (Ritchie), C. or Cider. Large, conical, angular, greenish yellow, flushed, mid-season; handsome, coloured like Hollandbury.
- Federal Pearmain**, resembles Claygate Pearmain.
- Fenouillet Rouge** (Moorhouse).
- Ferndale**, C. or Cider. Medium, round, red streaked.
- Fieftblütthe** (R.H.S.), D. Small, conical, pale green, flushed firm, late.
- Field's Favourite** (Ward), D. Medium, roundish, greenish yellow, acid, mid-season.
- Fillbasket**, see Kentish Fillbasket.
- First and Last** (J. Veitch & Sons), C. Medium, ovate, greenish yellow, flushed, acid, mid-season, very pretty.
- First and Last** (Lane), C. Medium, round, angular, pale yellow, soft, early.
- Fish's Golden Pippin** (Clayton), D. Small, ovate, pale green, brisk, hard, late; worthless.
- Fish's Pippin** (R.H.S.), D. Small, round, bronze streaked, mid-season; worthless.
- Five Crown**, see London Pippin.
- Five Crowned Pippin**, see London Pippin.
- Flanders Pippin** (Hooke), C. Large, flat, angular, bronzy red, streaked, brisk, sweet, first quality, late; a very fine handsome Apple.
- Flat Nonpareil** (R.H.S.), D. Small, flat, green, firm; worthless.
- Flemish Beauty** (Mundell), D. Medium, flat, green russet, bright red flushed, very firm, late; somewhat resembles Court Pendu Plat.
- † **Fletcher's Seedling** (Dickson), Medium, deep green.
- Flower of Herts** (Jones), C. Medium, round, flattened, green, streaked, soft, late.
- * **Flower of Kent** (J. Veitch & Sons), C. Large, flat, angular, large eye, bronzy green russet, streaked red, firm, mid-season.
- Flowery Town** (Crossland), C. Medium, flat, angular, green, streaked, acid, late.
- Ford's Pippin**.
- Forest Styre**, Cider. Small, round, pale yellow, flushed.
- Forester** (Jones), C. Large, oblong, pale green, flushed russet, firm, mid-season.
- * **Forfar Pippin** (J. Veitch & Sons), D. Medium, ovate, green, mid-season; second quality.
- * **Forge** (S. Ford), C. or D. Small, round, red streaked, early; second quality; a pretty coloured Apple.
- Forman's Crew** (R. Veitch & Son), D. Small, conical, green russet, mid-season; second quality.
- Forman's Crew**, see Wadhurst Pippin.

- Formosa**, see Pomme de Neige.
- Formosa Nonpareil**, see Claygate Pearmain.
- Formosa Pippin** (J. Scott), D. Medium, round, yellow, flushed, early ; third quality.
- Formosa Pippin**, see Claygate Pearmain.
- Four Square** (Bancroft).
- Fowler's Pippin**, see Claygate Pearmain.
- Foxwhelps**, Cider. Medium, conical, yellow streaked,
- Francis Joseph** (Paul & Son), C. Small, conical, angular, bronze green, acid, late.
- Franklin's Golden Pippin** (R.H.S.), D. Small, round, greenish yellow with grey spots, very brisk, acid, mid-season ; second quality.
- Freask's** (R.H.S.), C. Large, firm, round, green, faintly streaked red, late ; resembles Rhode Island Greening.
- French Bitter-sweet**, Cider. Small, round, greenish yellow.
- French Codlin**, Cider. Small, conical, orange, streaked red.
- French Codlin** (R.H.S.), C. Small, long ovate, very pale yellow, early, long stalk ; second quality ; very pretty.
- * **French Crab**, D. or C. Small, round, green, very firm, hard ; will keep two years.
- French Pippin** (Doig), see Scarlet Pearmain.
- French Quoining** (Ritchie), C. or Cider. Medium, ovate, angular, deep red, firm, mid-season, flesh tinged red.
- French Reinette**, see Scarlet Pearmain.
- French Reinette** (Pragnell), D. Small, conical, light russet, late ; second quality.
- French Royal Russet**, see Royal Russet.
- * **Friar's Pippin** (King), D. Small, round, yellow, early, acid ; third quality.
- Frogmore Golden Pippin** (Turner), D. Small, round, yellow, acid, mid-season ; third quality.
- Frogmore Nonpareil** (Turner), D. Small, flat, pale yellow, brisk flavour, mid-season ; first quality ; a very pretty Apple.
- * **Frogmore Prolific** (Jones), C. Large, round, pale yellow, soft, early ; first quality ; a great bearer.
- Frognell's Kernel** (Ritchie), C. Medium, ovate, pale green ; worthless.
- Fullwood**, see Dutch Fullwood.
- Furnell's** (Cheal), C. or Cider. Large, round, green, flushed red ; worthless.
- Gadd's Seedling**, see Beauty of Kent.
- Gallibro Pippin**, see Galloway Pippin.
- Galloway Pippin** (J. Veitch & Sons), C. Medium, flat, even, open eye, very clear pale yellow, firm, acid, late ; first quality ; a very handsome Apple.
- Galloway's Apple**, see Galloway Pippin.

- Galway's Pippin**, see Galloway Pippin.
- Ganges**, see Rhode Island Greening.
- Gardener's Pippin** (Wright), C. Medium, round, greenish yellow, firm, mid-season.
- * **Garrett's Golden Pippin** (Rowson), D. Small, round, yellow, early, acid ; third quality.
- Garrett's Pippin**, see Garrett's Golden Pippin.
- Gascoigne's Scarlet Seedling** (G. Bunyard & Co.), D. or C. Small, conical, scarlet flushed, mid-season ; second quality.
- * **Gascoigne's Seedling** (Killick), D. or C. Medium, oblong, pale yellow streaked and flushed rosy pink, with a thick bloom, mid-season ; first quality, very handsome.
- Gascoigne's Seedling** (R.H.S.), C. Medium, flat, greenish yellow with broad streaks and splashes of dark brown, soft white watery flesh ; second quality, mid-season.
- Gay's Harvest Reinette**, see Eccleston Pippin.
- Gelber Richard** (R.H.S.), C. Small, conical, pale yellow, firm, mid-season ; worthless.
- Gelber Winter Stettiner** (R.H.S.), D. or C. Small, round, green, flushed, mid-season ; third quality.
- General Johnson**, see Hoary Morning.
- German Apple** (Cranston Nursery Company), C. Large, round, flattened, green, streaked red, acid, late ; resembles Striped Beefing.
- German Codlin** (Cranston Nursery Company), C. Large, conical, angular, streaked yellow, soft ; first quality.
- German Nonpareil**, D. Small, round, greenish russet, late, brisk ; second quality.
- German Nonpareil**, see Wyken Pippin.
- Gestreifter Herbst Süsse** (R.H.S.), C. Small, oblong, curved, angular, pale green, streaked red ; worthless ; a very singularly formed Apple, sometimes very highly coloured.
- Gestreifter Reinette** (R.H.S.), D. or C. Small, conical, angular, green, red flushed ; third quality ; worthless.
- * **Gipsy King** (J. Veitch & Sons), D. Small, round, flattened, bronzy russet, mid-season ; second quality.
- Gipsy Queen** (J. Veitch & Sons), D. Small, flat, golden russet, flushed, brisk acid, mid-season ; second quality.
- Glamis Castle**.
- Glass of Wine**, see Court of Wick.
- * **Gloria Mundi** (R.H.S.), C. Very large, flat, sometimes oblong, angular, pale green, firm, acid, very solid, mid-season ; second quality ; a somewhat shy bearer.
- Glory of Charlwood** (Cheal), D. Small, round, red, mid-season ; third quality ; resembles Fearn's Pippin.
- Glory of England** (Haywood), D. Medium, round, red streaked, very sweet, first early ; second quality.

- Glory of England** (R.H.S.), see Gascoigne's Seedling.
- Glory of Hants**, see Ecklinville Seedling.
- * **Glory of the West** (Cummins), C. Large, round, angular, green russet, dry, mid-season.
- Glory of the West** (Lane), C. Medium, conical, pointed, yellow, flushed, soft, early.
- Gloucester Pippin**, see Blenheim Orange.
- Gloucester Underleaf** (Cranston Nursery Company), C. Medium, round, angular, green, flushed red, dry, mid-season; worthless.
- Glow of the West**, see Golden Noble.
- Godolphin** (Saunders), C. Small, conical, pale yellow, streaked acid, mid-season.
- Goff** (G. Bunyard & Co.), C. Small, round, pale yellow, flushed and streaked red, firm, acid, late; second quality; much grown in Kent.
- Gogar or Stone** (R.H.S.), D. Small, round, greenish yellow, firm, late; second quality.
- Gogar Pippin**, see Gogar or Stone.
- Gold Apple** (Saltmarsh), D. Small, round, angular, golden yellow, acid, early; second quality.
- Gold Hill Red** (Cranston Nursery Company), Cider. Small, round, very dark red, almost black.
- * **Golden Ball** (R.H.S.), D. Small, round, greenish yellow, very firm, acid, mid-season; resembles Cluster Golden Pippin.
- Golden Ball**, see Devonshire Buckland.
- Golden Ball**, Cider. Small, round, yellow.
- Golden Ball** (Amer) (Rivers), D. or C. large, round, greenish yellow; resembles Waltham Abbey Seedling.
- Golden Cluster** (Graham), C. Medium, conical, angular, green, flushed red, very acid, late.
- Golden Cluster Pippin**, see Cluster Golden Pippin.
- Golden Drop**, see Coe's Golden Drop.
- Golden Ducat** (Pragnell), D. or C. Large, round, angular, pale yellow, streaked, brisk acid, mid-season; first quality; resembles a pale Blenheim Orange.
- Golden Farmer** (J. Scott), D. Small, conical, golden, mid-season; first quality.
- * **Golden Harvey** (Wheeler), D. Small, conical, open eye, light russet, flushed red, sometimes streaked, flesh firm, yellow, rich, sweet, mid-season; first quality.
- * **Golden Knob** (G. Bunyard & Co.), D. Small, round, grey russet, firm, acid, mid-season; second quality; much grown in Kent.
- * **Golden Monday** (King), D. or C. Large, round, angular, yellow, streaked, early; third quality.
- * **Golden Noble** (R.H.S.), C. Large, round, clear pale yellow, firm, solid, acid, mid-season; first quality; a very handsome Apple, and great cropper.

- Golden Nonpareil** (R.H.S.), D. Small, round, golden russet, very hard, late; third quality.
- Golden Orange** (Clark), D. or C. Medium, conical, angular, pale-green, flushed, mid-season; resembles Golden Winter Pearmain.
- * **Golden Pearmain**, see Golden Winter Pearmain.
- Golden Pine Pippin**.
- * **Golden Pippin**, see Old Golden Pippin.
- Golden Pippin, Summer**, see Summer Golden Pippin.
- Golden Pitmaston**, see Pitmaston Golden Pippin.
- * **Golden Reinette** (R.H.S.), D. Medium, round, inclining to conical, large open eye, greenish orange streaked with red, mid-season; first quality; resembles King of the Pippins; very handsome.
- * **Golden Russet** (Turner), D. Small, conical, golden russet, sometimes flushed crimson, firm, sweet, mid-season; first quality.
- Golden Russet Nonpareil**, see Old Nonpareil.
- Golden Russet Nonpareil** (W. Paul & Son), D. Small, flat, grey, russet, dry, sweet, yellow flesh, mid-season.
- Golden Russet Pearmain** (Goldsmith), D. Small, flat, greenish russet, hard, late; worthless.
- * **Golden Spire** (G. Bunyard & Co.), C. Medium, tall, conical, angular, very clear orange yellow, soft, early; first quality; a very handsome Apple.
- Golden Stranger** (Mundell), see Golden Noble.
- Golden Vining**, D. Small, conical, yellow russet, mid-season; third quality.
- * **Golden Winter Pearmain** (R.H.S.), D. Medium, round, greenish yellow, hard, mid-season; third quality; somewhat confused with King of the Pippins, but distinct.
- Golding**, see Gooseberry Pippin.
- Golph**.
- Goodmore** (Ritchie), C. or Cider. Small, flat, red-streaked, acid, mid-season.
- † **Goodenough Nonesuch** (Rivers), see Goodenough Pippin.
- Goodenough Pippin** (Lane), D. or C. Medium, round, yellow, streaked red, early; second quality.
- Goose Apple** (Ritchie), C. Large, conical, pale green, soft, mid-season.
- Goose Green** (Garland).
- Gooseberry Pippin** (J. Veitch & Sons), C. Large, oblong, angular, sometimes flat, green, very firm, solid, late; first quality.
- Gooseberry Pippin** (Dickson), C. Small, conical, even, green, late.
- Gooseberry Pippin, Cider**.
- * **Gospatrik** (Ross), C. Medium, long conical, angular, greenish yellow, soft, mid-season; first quality.

- Gossing's Codlin** (Gilbert), C. Medium, conical, pale green, soft, acid, mid-season.
- Gough's Seedling**, see Golden Noble.
- Goygad Pippin**.
- Graham's Apple** (J. Veitch & Sons), D. Medium, round, green streaked, late ; third quality.
- Graham's Giant**, see New Hawthornden.
- Graham's Pippin** (King), D. Small, ovate, green, late ; third quality.
- † **Graham's Russet** (Fletcher's).
- Grand Alexander**, see Emperor Alexander.
- Grand Duke**, see Grand Duke Constantine.
- * **Grand Duke Constantine** (Pragnell), C. Very large, conical, flattened crown, pale straw, soft, early ; second quality ; somewhat resembles Emperor Alexander.
- * **Grand Sultan** (R. Veitch & Son), D. or C. Large, conical, angular, streaked yellow russet, flushed pink, soft, sweet, mid-season ; second quality ; resembles Cornish Gilliflower.
- Grange** (R.H.S.), C. Large, round, red streaked, late ; second quality.
- Grange Pippin** (Paul & Son), C. Medium, flat, angular, pale green, flushed, flesh white, soft, mid-season, skin very smooth and greasy.
- * **Grange's Pearmain** (Dickson), C. Medium, flat, angular, green, streaked red, firm, late ; first quality.
- Grange's Pearmain** (Selwood), see Winter Pearmain.
- Granny Gifford** (S. Ford), C. Medium, round, green, acid, mid-season ; second quality.
- * **Gravenstein** (R.H.S.), D. or C. Large, flat, angular, pale yellow, streaked red, very sweet, rich, early ; first quality ; a very handsome and high-flavoured Apple.
- Greasy Apple** (R. Veitch & Son), Cider. Medium, conical, yellow, streaked, skin very greasy.
- * **Greaves' Pippin** (Shingles), C. Medium, angular, dark green bronzy russet, firm, late ; resembles Alfriston.
- Greaves' Wonder** (Wood & Ingram), D. Small, round, red streaked, acid, early.
- Green Apple** (Clark), C. Medium, conical, angular, green, acid, late.
- Green Balsam**, see Rymer.
- Green Codlin** (Clark), C. Large, flat, angular, greenish yellow, mid-season ; resembles Calville Blanche.
- Green Beefing**, see French Crab.
- Green Bitter-sweet** (Ritchie), Cider. Large, round, angular, streaked, greenish yellow ; resembles Beauty of Kent.
- Green Blenheim**, see Hambledon Deux Ans.
- Green Chisel** (Walker), C. Medium, round, greenish yellow, soft, early, very long stalk.

- † **Green Costard** (Watkins), see Catshead.
- Green Dumpling** (Cheal), C. Medium, round, angular, green, flushed, very acid, late.
- Green Fullwood** (Rivers), D. Medium, round, pale green, firm, mid-season ; worthless.
- Green Goose**, see Alfriston.
- Green Goring** (Pearson), D. or C. Small, ovate, green, acid ; worthless.
- Green Gribble** (Poynter), C. or Cider. Medium, conical, angular, pale green, mid-season.
- Green Kitchen**, see Hambledon Deux Ans.
- Green Leadington**, see Catshead.
- Green Nonpareil**, see Petworth Nonpareil.
- Green Norman**, Cider. Small, conical, dark green.
- Green Pearmain** (Ritchie), D. Medium, round, green bronzed, late ; third quality.
- Green Pearmain** (Poynter), D. or C. Medium, conical, green, streaked, brisk, mid-season.
- Green Pippin** (Powell), Medium, round, deep green, flushed, late.
- Green Soldier** (Crossland), C. Medium, round, angular, green, streaked, acid, late ; like Yorkshire Greening.
- Green Sweet** (J. Scott), Cider. Small, flat, angular, pale green.
- Green Wilding**.
- Greening or Transparent**, see Transparent.
- * **Greenup's Pippin**, see Yorkshire Beauty.
- Greenwood Russet**, see Wareham Russet.
- **Grenadier** (G. Bunyard & Co.), C. Large, oblong, angular, greenish yellow, mid-season ; first quality ; a very fine handsome Apple.
- Grey Cheek**.
- Grey Leadington**, C. Large, oblong, angular, green, soft, early.
- Grey Pippin** (Saltmarsh), C. or D. Medium, round, green, netted with russet, late.
- Grimes' Golden** (J. Veitch & Sons), D. or C. Small, oblong, angular, yellow, sweet, mid-season.
- Gros Fenouillet** (Haycock), C. Medium, conical, green, streaked, late ; second quality.
- Gros Papa** (J. Scott), C. or Cider. Medium, round, green, flushed ; worthless.
- Gros Pigeonet**, see Baumann's Red Winter Reinette.
- Grosse Cuisse** (Saunders), C. Medium, round, yellow, flushed, acid, mid-season.
- Grosser Böhmer Apfel** (R.H.S.), D. Small, conical, green, flushed red, very firm, sweet, late.
- Grosser Casselar Reinette**, see Dutch Mignonne.
- Grüner Fürsten Apfel** (R.H.S.), D. or C. Medium, round, even, greenish yellow, flushed, very firm, mid-season.

- Guernsey Pippin**, see Golden Harvey.
- Haddow Pippin**, D. Medium, conical, angular, yellow streaked, early; resembles Duchess of Oldenburg.
- Haggerstone Pippin**, D. Small, conical, streaked, yellow, very hard, late.
- Hagloe Pippin** (J. Scott), D. Medium, round, streaked red, mid-season; second quality.
- Haigh Pippin**.
- Hail Apple**, C.
- * **Hall Door** (Rust), C. Medium, long, conical, orange, much streaked with red, flesh dry, acid, mid-season; third quality; a very pretty Apple.
- Hambleton**, see Hambleton Deux Ans.
- * **Hambleton Deux Ans** (R.H.S.), C. Large, round, even, greenish russet, streaked, flesh dry, acid, late; second quality.
- Hamilton's**, see Hambleton Deux Ans.
- Hammond's Jersey Pippin** (Parker), D. Small, flat, light russet, mid-season.
- Hammond's Pearmain** (Rivers), see Hammond's Pippin.
- Hammond's Pippin** (Saunders), D. Medium, conical, green, soft, mid-season.
- Hampshire Nonesuch** (Brunton), D. or C. Small, conical, angular, streaked yellow, mid-season.
- Hamsell**, C. or Cider. Medium, round, angular, red streaked, early; third quality.
- Handsome Norman**, Cider. Small, conical, green, russet.
- Hangdown Pippin**, Cider. Medium, round, angular, red streaked.
- Hangdowns** (S. Ford), D. or C. Medium, conical, yellow, streaked red, flesh dry; a very pretty Apple, but worthless.
- * **Hanwell Souring** (R.H.S.), C. Large, conical, even, greenish russet, red streaked, firm, acid, mid-season; first quality.
- Hard Bearer**, Cider. Medium, yellow, streaked.
- Hard Iron** (S. Ford), D. Small, flat, green, russet, very firm, late; worthless.
- Harold Pippin** (W. Paul & Son), D. Small, round, even, red streaked.
- Harryman**, see Gravenstein.
- Harvey's Everlasting**, see Allen's Everlasting.
- Harvey's Russet** (Brunton), D. Small, conical, pale russet, mid-season; second quality.
- * **Harvey's Wiltshire Defiance** (Dickson), see Scorpion.
- Hawley**, see Hawthornden.
- * **Hawthornden** (R.H.S.), C. Medium, round, flattened, pale green, flushed red at times, flesh white, acid, early; first quality; a great bearer, tree subject to canker.
- * **Hawthornden New**, see New Hawthornden.
- * **Hawthornden Old**, see Hawthornden.

- Hawthornden Red**, see Hawthornden.
- Hawthornden Winter**, see Winter Hawthornden.
- Hay's Seedling** (McKinnon). Medium, flat, pale green, mawkish sweet; worthless.
- Henry Apple**, Cider. Very small, conical, green, very firm.
- † **Henri Decaisne** (Peed), Large, flat, angular, deep green, eye closed, stalk deeply inserted.
- Hereford Russet** (Pearson), D. Small, round, russet, late; third quality.
- Herefordshire Beefing** (Cranston Nursery Company), C. Small or medium, flat, dark purplish red, firm, late; third quality; a very pretty Apple, and great bearer.
- Herefordshire Crimson Quoining** (G. Bunyard & Co.), C. or Cider. Medium, ovate, angular, bright red, sweet, mid-season.
- * **Herefordshire Pearmain** (Cranston Nursery Company), D. or C. Medium, conical, even, greenish russet, streaked red, firm, sweet; first quality, somewhat of the Ribston flavour; resembles Claygate Pearmain.
- Herefordshire Pippin**. Small, round, yellow, flushed; worthless.
- Herefordshire Sack Apple**, see Sack.
- Hertford Sweet** (Rivers), D. Medium, round, green, sweet, late; third quality.
- * **Hicks' Fancy** (R.H.S.), D. small, round, greenish yellow with a little russet, firm, brisk acid flavour, early, stalk long; first quality; a great bearer.
- Higgs' Seedling** (R.H.S.), Medium, conical, angular, pale straw, soft, early.
- Hill's Seedling**, see Cox's Pomona.
- Histon Favourite** (Wood & Ingram), C. Medium, conical, even, greenish yellow, flushed, mid-season; a very handsome Apple, much grown in Cambridgeshire.
- * **Hoary Morning**, C. Large, round, even, bright red streaked, with dense grey bloom, mid-season; second quality; a very handsome Apple.
- Hoffner's Golden Reinette** (R.H.S.), D. Medium, round, flattened, open eye, greenish orange streaked, sweet, mid-season; second quality; a very handsome Apple.
- Holbert's Prince Albert**, D.
- Holbert's Victoria** (Paul & Son), D. Small, conical or ovate, light grey russet, firm, rich, sweet, late; resembles Golden Harvey.
- Hole Apple** (Ritchie), resembles Yorkshire Beauty.
- Holker Pippin**, see Duke of Devonshire.
- Holland Pippin** (Woodbridge), D. Medium, conical, green, flushed, mid-season.
- Holland Pippin**, see Pott's Seedling.

- * **Hollandbury** (R.H.S.), C. Large, conical, angular, pale green, flushed bright scarlet, soft, very white flesh, acid, mid-season; second quality; an extremely handsome Apple.
- Holncote, Sweet** (Garland), Cider. Medium, round, yellow, streaked.
- * **Hollow Core** (R. Veitch & Son), C. Medium, conical, red, russet streaked, mid-season.
- Hollow Crown Pippin** (Paul & Son), D. or C. Medium, flat, green, late; worthless.
- Holtzen's Herbst Apfel**, see Edmund Jupp.
- Honeycomb** (J. Scott), D. or C. Medium, conical, even, red streaked, mid-season; worthless.
- Hook Street Pippin**.
- * **Hormead Pearmain** (Dickson), C. Large, conical, even, greenish yellow, russety, brisk flavour, mid-season; first quality; a very handsome Apple.
- Horner** (J. Scott), D. Small, round, yellow, mid-season; inferior.
- Hornson** (Rogers), C. Medium, conical, angular, greenish yellow, firm, brisk, early.
- Hotchkin Pippin** (Rivers).
- Howick King** (Rollo), C. Medium, conical, angular, green, flushed bronze, late.
- Hubbard's Pearmain** (Saltmarsh), D. or C. Medium, conical, green, mid-season; third quality.
- * **Hubbard's Pearmain** (Lee), D. Small, flat, yellow, firm, mid-season; first quality.
- Hubbard's Russet Pearmain** (Brunton), D. Medium, conical, angular, reddish russet, mid-season; third quality.
- Hubbardstone's Nonesuch** (R.H.S.), D. Medium, round, copper coloured, streaked, sweet, late.
- * **Hughes' Golden Pippin** (Goldsmith), D. Small, flat, greenish yellow, firm, mid-season; first quality.
- Hughes' Nonpareil**, D.
- Hulbert's Victoria** (Paul & Son), see Holbert's Victoria.
- * **Hunthouse** (Pearson), C. Small, conical, angular, green, russety, firm, acid; great bearer.
- Hunthouse Pippin** (Rowson), D. or C. Small, conical, pale green; worthless.
- Huntingdon Codlin** (Wood & Ingram), C. Large, long conical, angular, pale orange, mid-season; first quality; a very fine-looking Apple.
- Hunt's Deux Ans** (Lee & Son), D. or C. Small, conical, pale green, bronze flush, very firm, late; will keep two years; worthless.
- Hunt's Duke of Glo'ster** (J. Veitch & Sons), D. Small, flat, russet, mid-season; first quality.

- Hunt's New Green Newton Pippin** (R.H.S.), D. Medium, round, green, flushed, firm, late.
- Hunt's Nonpareil** (Benson), D. Small, round, light russet, late; second quality.
- Hunt's Royal Nonpareil** (Rivers), D. Small, round, green, russet, flushed, late; resembles Old Nonpareil.
- Hunt's Royal Red** (R.H.S.), D. Small, round, bronze red, sweet, firm, late.
- Hurmann's or Herman's Pippin** (Poynter), C. or D. Medium, conical, even, green, streaked, acid, late.
- Hussey's Pearmain** (J. Scott), C. or Cider. Medium, round, flushed yellow, acid, mid-season; a very handsome Apple.
- Hutton Square** (Crossland), C. Large, roundish ovate, angular, greenish yellow, flushed, late.
- Hyslop Crab**, Deep crimson fruit, very prolific and ornamental.
- Hyslop Pippin**, see Hyslop Crab.
- Imperial** (Paul & Son), D. Small, flat, angular, red streaked, firm, late; second quality.
- Improved Ashmead's Kernel** (Lee & Son), D. Medium, flat, greenish russet, flushed, acid; greatly resembles Brad-dick's Nonpareil.
- * **Improved Bess Pool** (Pearson), D. Medium, oblong, greenish russet, flushed and streaked dark red, late; a larger and improved form of the Old Bess Pool.
- Improved Keswick Codlin** (Harrison), Medium, roundish, angular, pale straw, acid; later and of more rounded form than the Keswick Codlin.
- Improved Red Cap** (J. Scott), Cider. Medium, conical, red flushed.
- † **Inchmahone** (Drummond), Medium, round, green streaked, red, firm, acid, late; resembles Rymer.
- * **Incomparable**, see Lewis's Incomparable.
- Incomparable Red** (Jefferies), C. or D. Medium, conical, yellow, flushed red, mid-season; very pretty.
- Ingestrie**, see Yellow Ingestrie.
- Irish Cluster** (King), D. Small, round, angular, flushed, yellow; worthless.
- Irish Codlin**, see Carlisle Codlin.
- Irish Giant** (Turner), C. Very large, round, angular, pale green, streaked; somewhat resembles Beauty of Kent.
- Irish Greening** (Reid), D. Small, round, angular, greenish yellow, sweet, early; third quality.
- † **Irish Peach** (Dickson & Co.), D. Medium, flat, warm yellow, streaked, sweet tender flesh; first quality; first early.
- * **Irish Pitcher** (Dunn), C. Small, round, greenish yellow, acid, early; like Hawthornden.
- Irish Russet**, see Sam Young.
- Iron Apple**, see Brabant Bellefleur.

- Iron Jack** (Haywood), D. Small, round, angular, yellow, streaked, with numerous white spots, sweet; worthless.
- Iron King**, see French Crab.
- Ironsides** (Poynter), C. Medium, round, bronzy green, late.
- Isle of Wight Pippin** (R.H.S.), D. Small, round, greenish yellow, sweet, mid-season.
- Izod's Kernel** (Cranston Nursery Company), C. or Cider. Large, flat, red streaked, early, handsome; see Tom Putt.
- * **Jacques Lebel** (Saunders), C. Medium, flat, large, open eye, orange flushed, sweet, dry, mid-season.
- Jacquin** (J. Scott), C. Medium, flat, pale green, flushed, acid, mid-season.
- James's Pearmain** (Ritchie), D. or C. Medium, round, flushed yellow, acid, mid-season; second quality, pretty.
- Jamie Brown** (Crossland), Medium, conical, angular, green, flushed, acid, late.
- January Tom Putt** (Poynter), see Tom Putt.
- Jean or Jan Apple** (Rogers), C. Small, conical, yellow, streaked, acid, mid-season.
- * **Jefferson** (R.H.S.), D. Small, flat, streaked yellow, early, sweet; second quality; a pretty early Apple.
- Jeffrey Seedling** (Goldsmith), C. Medium, conical, flattened, pale yellow, flushed, dry, early.
- Jennet Moyle** (Rivers), D. Medium, round, red streaked, soft, acid, early; handsome.
- Jenny Hubert** (Ritchie), C. Small, round, streaked yellow, mid-season.
- Jenny Oubury**, see Old Pomeroy.
- Jenny Sinclair** (Clark), C. Small, tall conical, streaked yellow, early; third quality.
- Jersey Chisel** (J. Scott), Cider. Small, conical, streaked yellow.
- Jersey Lemon Pippin**, D. or C. Medium, long conical, pale green, flushed bronze, mid-season; worthless.
- Jersey Monarch** (Saunders).
- Jersey Nonesuch**, D. or C. Medium, flat, angular, green, russet, acid, late.
- Jersey Pippin** (Saunders), see Hammond's Jersey Pippin.
- Jersey Pippin** (Rivers), D. Small, round, russet, sweet, mid-season; first quality.
- Jews' Hands** (Gee), see Pile's Russet.
- John Apple** (R.H.S.), D. Small, round, green, slightly flushed, firm and fresh, sweet; first quality; retains its freshness until May.
- John Apple** (Ritchie), D. or C. Medium, round, red streaked, sweet, mid-season; resembles Tom Putt.
- John Apple** (Pearson), C. Medium, round, bronze green, late; worthless.
- John Apple**, see Northern Greening.

John Brown.

John Landon (Robertson), C. Medium, pointed, conical, green; worthless.

John Thompson (Graham), C. Large, flat, very angular, streaked yellow, acid, mid-season.

* **Jolly Beggar**, see Lord Grosvenor.

Jolly Gentleman, see Emperor Alexander.

Jolly Miller (Bull), C. Medium, flat, angular, flushed red, soft, acid, mid-season; handsome.

Jonathan (Rivers), D. or C. Medium, oblong, angular, pale green, flushed red, acid, mid-season.

Jones's Favourite (Ritchie), C. or Cider. Large, conical, angular, pale straw, dry, mid-season; worthless.

Joseph de Brichy (J. Scott), D. Medium, conical, streaked yellow; worthless.

Julien, see Early Julien.

June Gilliflower (Cummins), D. Small, round, yellow, soft, early; first quality.

Juneating, see White Juneating.

* **Keddleston Pippin** (Lee & Son), D. Small, round, greenish yellow, firm, sweet, mid-season.

Keen's Seedling (T. McDonald), D. or C. Small, ovate, angular, dark green, flushed bronze, very acid, late.

Kemp's Orange, see Cox's Orange Pippin.

Kempston (Druce), C. Large, conical, green, russety, firm, mid-season.

Kentish Beauty, see Beauty of Kent.

* **Kentish Broading**, see Beauty of Kent.

Kentish Codlin (R.H.S.), C. Medium, conical, angular, greenish yellow, flushed, early; first quality; very closely resembles Old English Codlin.

Kentish Codlin, resembles Carlisle Codlin.

Kentish Fillbasket (G. Bunyard & Co.), C. Large round, angular, pale green, flushed and streaked, mid-season.

Kentish Golden Knob, see Golden Knob.

* **Kentish Orange Goff**, see Goff.

Kentish Pearmain.

Kentish Pippin, see Colonel Vaughan.

Kernel Apple, Cider. Small, long, conical, yellow, flushed.

* **Kerry Pippin**, D. Small, ovate, streaked orange, firm, sweet, early; first quality.

* **Keswick Codlin**, C. Medium, oblong, angular, pale yellow, sometimes flushed orange, soft, brisk, tender, early; first quality; a great bearer.

Killerton Sweet (R. Veitch & Son), Cider. Small, round, angular, yellow.

King, see Warner's King.

King Apple (Wheeler), D. Medium, conical, bronzed, green, mid-season; third quality.

- King Charles' Pearmain** (Ritchie), D. Medium, conical, golden russet, dry, mid-season ; worthless.
- * **King Harry** (R.H.S.), D. Medium, conical or oblong, even, greenish yellow, with small russet spots, tender, sweet, brisk, early ; first quality ; a fine Apple.
- King Noble**, see Stirling Castle.
- King of the Orchard** (Cheal), see Baxter's Pearmain.
- * **King of the Pippins**, D. Medium, oblong, open eye, greenish yellow, streaked and flushed red, mid-season ; first quality ; a great and certain cropper.
- * **King of Tomkins County** (Rivers), D. or C., very large, round, angular, greenish yellow, streaked, soft, mid-season ; first quality ; a very handsome Apple.
- King's**, see Warner's King.
- King's Sauce** (Griffin), C. Large, oblong, angular, red flushed, soft, mid-season.
- Kingston Black**, Cider. Small, round, dark red, streaked.
- † **Kingston Pippin** (Frettingham).
- Kinnoul Pippin** (Reid), C. Small, round, pale yellow, acid, firm, mid-season.
- * **Kirke's Fame** (Harrison), C. Large, round, streaked orange, dry, mid-season.
- Kirke's Lord Nelson** (Wheeler), D. or C. Medium, round, yellow, streaked, mid-season, sweet ; first quality.
- Kirke's Schone Rambour** (R.H.S.), D. or C. Large, flat, angular, pale yellow, red flushed, soft, mid-season ; very closely resembles Cox's Pomona.
- Kirkfield Pippin** (King), C. Small, round, greenish yellow, flushed ; worthless.
- Kirton**, see Keen's Seedling.
- Kitchen Pippin** (Pearson), C. Small, round, angular, bronze green, late ; worthless.
- Kitchen Reinette** (Rowson), C. Medium, flat, bronze green, very firm, late.
- Knight's Fame** (Saltmarsh), C. Medium, conical, green, flushed bronze, dry ; a fine handsome Apple.
- Knight's Lemon Pippin** (R.H.S.), D. Small, round, very small eye, greenish russet, flushed red, very firm, sweet, late.
- Knight's No. 1** (R.H.S.), C. Small, conical, pale yellow, soft, early.
- Kroon Apfel** (R.H.S.), D. Small, ovate, greenish yellow, streaked and spotted bright red, sweet, mid-season ; third quality ; some seasons very beautiful.
- Ladies' Everlasting**, D. Medium, round, angular, green, red flushed, mid-season ; first quality.
- Ladies' Sweeting** (Rivers), D. or C. Round, green, flushed, sweet, soft ; worthless.

- † **Lady Alice Eyre** (Ross). Medium, round, flattened, pale green, flushed, sweet, second early ; second quality.
- Lady Apple**, see D'Api, or Pomme d'Api.
- Lady Apple** (King), D. or C. Small, conical, very angular, greenish russet, flushed red ; worthless.
- Lady Derby** (Haycock), see Summer Whorle.
- Lady Duncan** (Pearson), C. Medium, conical, angular, bronze green, acid, mid-season.
- Lady Hayes** (Cummins), C. or Cider. Large, round, streaked yellow, acid, early ; third quality ; very handsome.
- * **Lady Henniker** (J. Veitch & Sons), D. or C. Large, oblong, angular, streaked yellow with russet, mid-season ; first quality ; a very handsome Apple.
- † **Lady Kinloch** (Laird). Medium, oblong, pale green streaked with red, firm, solid ; second quality ; a very pretty Apple.
- Lady Lennox** (Gilbert), C. Small, flat, streaked yellow, very acid, late.
- Lady Lovers** (Smith), D. Small, ovate, yellow, streaked ; worthless.
- † **Lady Sudeley** (Bunyard). Medium, oblong, or conical, greenish yellow, streaked red, first early ; first quality ; great cropper.
- Lady Sutherland**, see Lord Suffield.
- Lady's Blush** (Pearson), C. Small, round, pale green, hard, mid-season ; worthless.
- Lady's Finger**, see Smart's Prince Arthur.
- Lady's Finger** (Cranston Nursery Company), D. or C. Small, very long ovate, greenish yellow, streaked, firm, dry, mid-season ; very distinct, but worthless.
- Lady's Finger** (Morrison), D., see Egg or White Paradise.
- La Fameuse**, see Pomme de Neige.
- Laidlaw Right Keeper** (Graham), C. Medium, conical, angular, green, flushed, acid, hard, very late.
- * **Lamb Abbey Pearmain** (R.H.S.), D. Small, oblong, green, flushed, very firm, sweet, late ; first quality.
- Lamb Brook Pippin** (J. Scott), D. or C. Small, flat, green, streaked, late ; worthless.
- Lamb's Favourite**, see Small's Admirable.
- Lamb's Nose** (Ward), D. or C. Medium, conical, angular, yellow, flushed red ; worthless.
- Lammas Apple** (McKinnon), C. Small, ovate, greenish yellow ; second quality, early.
- Lancashire Pippin** (Crossland), C. Small, long ovate, pale green, flushed, mid-season.
- Landmere Russet**, see Hanwell Souring.
- * **Landsberger Reinette** (R.H.S.), D. or C. Medium, conical, angular, pale straw, occasionally flushed, brisk, fresh, early ; first quality ; very handsome, and a good bearer.

- * **Lane's Prince Albert** (Lane & Son). Large, roundish, even, pale green, streaked and flushed bright red, late; first quality; a very handsome Apple, great cropper.
- Lane's Prolific** (Lane), D. or C. Medium, conical, even, greenish yellow, mid-season; very pretty.
- Lanterne**, see Rymer.
- Large Russet**, see Royal Russet.
- Large Yellow Bough**, see Yellow Bough.
- Lass o' Gowrie** (Doig), C. Large, round, angular, yellow, early.
- * **Late Marrow** (King), D. Small, flat, angular, bronze red; worthless.
- Lauder Lud** (Sharp), D. or C. Small, flat, angular, green bronze.
- Lawrence's Seedling**, see Hanwell Souring.
- Lawson's Pearmain** (Burnett), C. Medium, round, green, acid, mid-season; worthless.
- Leadington Monstrous**, see Catshead.
- Leadington Stoup**, see Stoup Leadington.
- Leather Jacket**.
- Leathercoat**, see Old Leathercoat Russet.
- Leathercoat Brown Russet** (Rowson), see Old Leathercoat.
- † **Leicester Burton Pippin** (Frettingham), Medium, oblong, pale green, streaked; like Old Nonesuch.
- Lemon**.
- Lemon Apple** (Woodbridge), D. Medium, ovate, yellow, russet, mid-season; second quality.
- * **Lemon Pippin** (R.H.S.), D. or C. Small or medium, ovate, with a peculiar fleshy knob in which the stalk is inserted, yellow, occasionally streaked russet, sweet, mid-season; first quality.
- Lemon Square** (Crossland), D. Small, oblong, angular, yellow, early; worthless.
- Leppard's White Pippin** (S. Ford), D. or C. Medium, flat, yellow flushed, mid-season.
- * **Lewis's Incomparable** (J. Veitch & Sons), D. Large, conical, streaked yellow, russety, sweet, mid-season; a very handsome Apple.
- Leyden**, see Early Julien.
- Leyden Pippin** (Harding), C. Medium, conical, angular, green, flushed bronze, mawkish sweet; worthless.
- Liddon's Prolific** (Poynter), C. Medium, conical, orange, streaked, firm, acid, mid-season.
- Lilac**, see M'Lellan's.
- Lincoln** (Rogers), Cider. Small, pointed, conical, yellow, flushed.
- Lincoln Holland Pippin**, see Wadhurst Pippin.
- Lincoln Pippin** (Haycock), C. Large, long, conical, angular, pale green, mid-season.

- Lincolnshire Holland Pippin** (Benson), C. Medium, ovate, angular, yellow, flushed, very acid, mid-season; third quality.
- Lincolnshire Pippin**, see Hawthornden.
- Lincolnshire Reinette**, see Braddick's Nonpareil.
- Linnæus Pippin** (J. Scott), D. Small, round, green, russet, hard, late; worthless.
- Lippair Wilding** (R.H.S.).
- Little Dick** (Ward), D. Very small, flat, red flushed.
- Little John** (Campsie), C. Medium, round, yellow, flushed, dry, acid, mid-season; worthless.
- Littlewick White** (Bridgman), C. Small, conical, green, spotted, acid, mid-season; worthless.
- Liver Pearmain** (Ritchie), D. or C. Small, conical, green, flushed dark bronze or liver colour, late; worthless.
- * **Liver's Imperial** (Pearson), C. Large, conical, streaked yellow, soft, very acid, early; handsome, but worthless.
- Livesay** (Hathaway).
- Livesey's Imperial**, see Hollandbury.
- Livesley's Imperial**, see Lord Suffield.
- Loan's Pearmain** (R.H.S.), D. Medium, round, green, streaked, russety, late; somewhat resembles small examples of Claygate Pearmain.
- * **Loddington Seedling** (Killick), C. Large, round, angular, pale green, flushed, firm, mid-season; first quality; a fine handsome Apple, much grown in Kent.
- Lodgemore Nonpareil** (J. Veitch & Sons), D. Small, round, golden russet, late.
- Loggerhead**, see Catshead.
- London Peach** (Pearson), C. Medium, flat, angular, yellow, bronzed, acid, late; worthless.
- * **London Pippin** (R.H.S.), D. or C. Medium, flat, very angular, green, flushed red, late; first quality.
- Long Peeler** (Matthews), Small, ovate, green, red flushed; worthless.
- Long Reinette** (J. Fowler).
- Long Start** (Crossland), C. Small, round, streaked yellow, mid-season.
- * **Long Stemmed Pippin** (Garland), D. or C. Medium, conical, even, green, red streaked, mid-season; stalk remarkably long.
- * **Longville's Kernel** (R.H.S.) D. or C. Medium, round, streaked yellow; second quality; early.
- Lopen Never Blight** (J. Scott), Cider. Small, round, red streaked.
- * **Lord Burghley** (R.H.S.), D. Medium or Small, flat, angular, green, russet bronzed, firm, late; first quality; resembles Sturmer Pippin.
- Lord Clyde** (Rivers), see Golden Noble.

- Lord Combermere** (Melliar),
- * **Lord Derby** (Lane & Son), C. Very large, oblong, angular, greenish yellow, mid-season; first quality; a fine handsome Apple and great bearer.
- Lord Duncan**, C. Medium, round, angular, pale yellow, acid, soft, early; Codlin type.
- Lord Duncan**, see Dumelow's Seedling.
- Lord Dunmore** (Robertson), C. Large, conical, angular, pale yellow, flushed red, soft, acid, early.
- Lord Elgin** (Chuck), C. Large, conical, angular, green, acid, late; like Yorkshire Greening.
- Lord Exeter's Favourite**, see Hicks' Fancy.
- Lord Granville** (Fairbairn), C. Large, conical, very angular, light green, soft, acid, mid-season.
- * **Lord Grosvenor** (Mundell), C. Large, oblong, angular, pale yellow, early; first quality.
- Lord Gwydyr's** (Coombes), C. Medium, round, pale yellow, mid-season.
- Lord Hampton's Wonder**, C. Medium, round, angular, bronze green; worthless.
- Lord Hampton's Wonder** (Hathaway), see Dumelow's Seedling.
- Lord Kingston**, see Hawthornden.
- * **Lord Lennox** (Harrison), D. Small, flat, orange, red streaked, brisk, early; second quality; greatly resembles Fearn's Pippin.
- † **Lord Paulett's Pearmain** (Lucombe), Medium, oblong, streaked green.
- Lord Raglan** (McKinnon), C. Large, flat, angular, pale green, flushed, very firm, dry, late; resembles a flat Yorkshire Beauty.
- Lord Raglan**, see Loddington Seedling.
- * **Lord Suffield**, C. Large, conical, very pale yellow, soft, first early; first quality; a very fine Culinary Apple, and a great cropper.
- Lord Suffolk** (J. Scott), D or C. Small, flat, bronze green, late; third quality.
- Lord Wolseley** (Britcher), see Devonshire Buckland.
- Lucombe's Pine** (R.H.S.), D. Small, conical, clear pale yellow, very firm, sweet; first quality, mid-season.
- * **Lucombe's Pine Apple**, see Lucombe's Pine.
- Lucombe's Seedling** (R.H.S.), C. Medium, round, flattened, greenish yellow, streaked, soft, acid; second quality, mid-season.
- Luffness Matchless**, C. Medium, oblong, angular, green, flushed red, acid, mid-season.
- Luffness Pippin** (Brunton), Small, round, yellow, flushed red; worthless.

- * **Mabbott's Pearmain** (W. Paul & Son), D. Medium, conical, even, orange yellow, streaked red and minutely spotted, brisk, acid, mid-season; first quality; very handsome.
- Macdonald's Apple** (Dunn).
- Macdonald's Favourite** (Cairns), C. Large, round, angular, yellow, flushed red, mid-season, greatly resembles Yorkshire Beauty.
- M'Clellan's, American** (Rivers), C. Medium, round, angular, streaked yellow, soft, mid-season; second quality.
- M'Lean's Favourite** (W. Paul & Son), C. Medium, round, greenish yellow, soft, sweet, early.
- Maclellan**, see M'Clellan's.
- Maclery's Pippin** (Neighbour), C. Medium, round, light green, acid, late.
- Madame Hayes** (J. Scott), D. Medium, round, streaked yellow, sweet, early; second quality.
- Madeline** (J. Scott), D. or C. Medium, round, angular, streaked red, mid-season; worthless.
- * **Magnum Bonum**, see Roundway Magnum Bonum.
- Magpie** (Langridge), D. or C. Large, round, yellow, streaked, acid, early; second quality.
- Maiden**, see Nonesuch.
- Maiden Apple** (Cheal), D. Medium, conical, angular, yellow, streaked red, acid, firm, mid-season; second quality.
- Maiden's Blush** (R.H.S.), D. or C. Medium, flat, small eye, greenish yellow, beautifully flushed pink, sweet; second quality; mid-season.
- Majetin**, see Winter Majetin.
- Majestic**, see Downton Pippin.
- Major Hemming** (Brunton), D. Medium, conical, angular, green, flushed bronze, hard, late.
- Mala Kovna** (R.H.S.), D. Small, round, dark red, firm, acid, mid-season; third quality; pretty, but worthless.
- * **Maltster** (Selwood), C. Medium, flat, angular, greenish yellow, flushed, mid-season; first quality.
- Mammoth Pippin**, C. Medium, flat, green, late.
- Manchester Pippin** (R.H.S.), D. Medium, round, greenish yellow, streaked, acid, mid-season, very firm; greatly resembles Cox's Orange Pippin.
- Mango Pippin** (Rivers), D. or C. Medium, round, green, streaked, soft, mid-season; second quality.
- * **Manks' Codlin** (R.H.S.), C. Medium, round or conical, pale yellow, sometimes flushed pink, skin very greasy, firm, acid, early; first quality; great cropper.
- * **Mannington's Pearmain** (J. Veitch & Sons), D. Medium, conical, even, greenish orange, streaked and russety, mid-season; first quality.
- Margaret**, see Early Margaret.

- Margaret Henrietta** (S. Ford), D. Small, round, angular, bright red, sweet, white flesh, mid-season; pretty, but worthless.
- Margaret Pippin** (R.H.S.), D. Small, round, green, sweet, mid-season; worthless.
- * **Margil**, D. Medium, round, angular, greenish yellow, streaked dark red, firm, sweet, somewhat dry, mid-season; first quality; a great favourite.
- * **Marigold** (King).
- Marriage Maker** (Poynter), Cider. Small, conical, deep scarlet; very handsome.
- Mark Marshall** (Cheal), Medium, flat, angular, bronze, flushed.
- Marmalade Pippin** (Pragnell), D. or C. Medium, ovate, red streaked, soft, first early; second quality; handsome.
- Marshall's Seedling** (Rivers), Medium, round, pale yellow, streaked; second quality; pretty.
- Martin Nonpareil** (J. Veitch & Sons), D. Small, round, greenish russet, sweet, late; first quality.
- Mary Greeds** (R.H.S.), D. Medium, round, yellow, early; first quality.
- Mason's**, see Claygate Pearmain.
- † **May Queen** (Southall), Medium, oblong, angular, deep red, streaked, late.
- Maynack's Pippin** (Rivers), C. Medium, conical, yellow, soft, first early; worthless.
- Maynard's Bearer** (Britcher), Cider. Medium, flat angular, orange streaked.
- May's Seedling** (Turner), D. Small, conical, red streaked, mid-season; second quality; resembles Colonel Vaughan.
- Mead's Broading**, see Irish Giant.
- Mealy Late Blossom** (Poynter), D. or C. Small, conical, greenish yellow, flushed, acid, late; worthless.
- Mee's Seedling** (Pearson), C. Medium, conical, angular, pale green, very firm, acid, late.
- Mela Carla** (Haycock), D. Medium, round, yellow, flushed, sweet, mid-season; second quality.
- * **Melon Apple** (Rivers), D. Large, round, orange yellow, streaked, sweet, tender, mid-season; first quality; a very pretty Apple.
- * **Melrose**, see White Melrose.
- Melville Pippin**, see Scarlet Pearmain.
- Menagère**, see Brietling.
- * **Mère de Ménage** (R.H.S.), C. Large, flat, angular, large open eye, reddish bronze, sometimes streaked, firm, acid, late; first quality; a very handsome solid Apple.
- Mickleham Pearmain** (Burnett), D. Medium, conical, even, reddish bronze, firm, mid-season; second quality; a handsome Apple, resembles Duck's Bill.

- Mignonne Rouge** (Haycock), D. Small, round, purplish red, soft early; pretty, but worthless
- Milford Pippin**, see Golden Pippin.
- Milford Pippin**, C. Large, conical, greenish russet, flushed, acid, mid-season.
- Miller's Glory** (R.H.S.), C. Medium, round, flattened, bronze green, streaked, hard, late; resembles Norfolk Beefing.
- Miller's Lüken Hagen** (R.H.S.), D. Medium, round, yellow, flushed, mid-season; third quality.
- Millpeck Apple**, C. Medium, oblong, pale green, flushed russet, mid-season.
- * **Minchall Crab** (R.H.S.), C. Large, flat, large eye, greenish yellow, streaked, firm, acid; first quality; late; a fine culinary Apple.
- Mincing Pippin** (Rust), C. Medium, round, green, streaked, acid, mid-season.
- Minier's Dumpling**, see Warner's King.
- Minshul Crab**, see Minchall Crab.
- Minsterworth's** (Wheeler), Cider.
- * **Missouri Pippin** (W. Paul & Son), D. Small, round, green, flushed red, late; third quality.
- Mistayer** (J. Scott), Small, conical, green, streaked, dry; worthless.
- Mitchell's Red** (S. Ford), D. or C. Small, round, green, flushed, acid, late.
- Mitchell's Seedling** (S. Ford), see Hambledon Deux Ans.
- Monarch** (Saunders).
- Monmouth Green**, C. Small, round, green, late; worthless.
- Monmouth Pippin** (Rivers), C. Small, flat, green, hard; worthless.
- Monmouthshire Beauty** (Jenkins), D. Medium, ovate, angular, red streaked, sweet, mid-season; first quality; resembles American Mother.
- Mononisten Reinette** (R.H.S.), D. Medium, round, even, greenish yellow, streaked, firm, late; second quality.
- Monstrous Leadington**, see Catshead.
- Monstrous London Pippin**.
- Monstrous Pippin**, see Gloria Mundi.
- Monymusk**, see Margil.
- Monymutt's Paradise** (Pearson), C. Medium, round, greenish yellow, streaked, acid, late; in appearance like Wadhurst Pippin.
- Moody's Jersey**, Cider. Small, round, streaked, yellow.
- Moor Farm** (Hathaway), Medium, round, orange flushed, acid; worthless.
- Moor Park Pippin** (Turner), D. Medium, round, even, red streaked, mid-season; third quality.
- Morgan**, see Morgan's Sweet.

Morgan's Sweet (Poynter), C. or Cider. Large, conical, angular, pale yellow, early, sweet, dry flesh ; third quality ; a favourite Apple in Somerset.

Morgewell Pippin (Cummins).

Morningthorpe Pippin.

Morris's Court of Wick (R.H.S.), D. Small, flat, greenish yellow, streaked, acid, mid-season ; second quality.

Morris's Russet (R.H.S.), D. Small, round, light grey russet, flushed, mid-season ; first quality.

Moss's Incomparable (Pearson), C. or D. Medium, flat, very deep eye, very angular, greenish russet, streaked, acid, late.

* **Mother Apple** (J. Veitch & Sons), C. Medium, round, streaked yellow, acid, early ; third quality.

• **Mother Apple**, Cider. Small, conical, pale green, flushed.

Moxhay, see **Sturmer Pippin**.

† **Mr. Gladstone**, D. Small, conical, angular, reddish crimson, streaked, soft, first early, sweet ; second quality.

* **Mrs. Barron** (R.H.S.), C. Large, oblong, angular, yellow, sweet ; first quality ; mid-season.

Mrs. Parrott (Lane), C. Medium, round, angular, green, flushed red, firm, late ; second quality.

Muckenham Pearmain (Burnett), see **Manchester Pippin**.

Muckenham Rother Winter Koenig (R.H.S.), C. Medium, round, angular, purplish red, firm, late ; third quality ; a very handsome Apple.

Mumm's Red (Cranston Nursery Company), Cider. Round, even, streaked yellow ; pretty.

Munches Pippin (Dunn), C. Medium, round, angular, bronzy red, late ; third quality.

Murdy Apple (Cranston Nursery Company), Cider. Small, conical, yellow flushed.

Murfitt's Apple, see **Murfitt's Seedling**.

Murfitt's Seedling (Bull), C. Large, round, angular, uniform pale green, very greasy, acid, mid-season ; first quality ; a favourite Apple in Cambridgeshire.

Murie Seedling (Morrison), D. Small, conical, greenish yellow, flushed bronze ; somewhat resembles **King of the Pippins**.

Musk Apple, see **Carlisle Codlin**.

Muskirke Gelbe Reinette, see **Bess Pool**.

Muss Russet, see **Pine Apple Russet**.

Myatt's George the Fourth (R.H.S.), C. Medium, flat, angular, yellow flushed red, mid-season.

Naked Apple (King), C. Round, yellow flushed ; resembles **Yorkshire Beauty**.

Nancy Jackson (Rivers), C. Large, round, russety, yellow, streaked, acid, late ; first quality.

Nancy Jackson (Cheal), C. Medium, conical, large open eye, green streaked, acid, late.

- * **Nanny** (Chorley), D. Medium, round, orange yellow, streaked, red, firm, sweet, early; first quality; a favourite Sussex Dessert Apple.
- * **Nelson Codlin** (J. Veitch & Sons), C. Large, conical, angular, greenish yellow, very greasy, mid-season; first quality.
- * **Nelson's Glory**, see Warner's King.
Nelson's Prolific (Haycock).
Never Fail (Dunn). Small, round, angular, bronze.
- New Apple** (Cummins), D. Large, round, angular, streaked yellow, brisk, mid-season; first quality; a very handsome Apple.
- New Bess Pool** (Pearson), D. Medium, conical or ovate, red streaked, late; first quality; a large, highly coloured variety of Bess Pool.
- New Blandon**, see Autumn Calville.
- New Comb** (Ritchie), C. Medium, round, green, streaked red, mid-season.
- New Green Nonpareil** (R.H.S.) D. Medium, round, bronzy green, brisk acid, late; second quality.
- * **New Hawthornden**, C. Large, flat, angular, green, flesh soft, acid, early; first quality; a very free bearer when young; Winter Hawthornden of some.
- New Large Cockpit** (Slater), C. Medium, flat, angular, pale green, streaked red, acid, firm, mid-season; first quality; quite distinct from Cockpit.
- New Liver's Imperial** (Pearson), C. Medium, conical, angular, pale green, streaked, soft, mid-season.
- * **New Northern Greening** (Pearson), C. Medium, round, ovate, open eye, even, green, streaked, very firm, acid, late; first quality; handsome.
- New Scarlet Pearmain**, see Brabant Bellefleur.
- New Ribston Pippin** (Jones), D. Medium, roundish, orange russet, flushed, firm, sweet, Ribston flavour, mid-season; first quality.
- New Rock Pippin** (R.H.S.), D. Small, flat, angular, greenish yellow, russet, firm, late; second quality.
- New Rollisson's** (Hathaway).
- † **Newland's Sack** (W. Crump).
- * **Newtown Pippin** (Haycock), D. or C. Medium, round, angular, green, late; first quality.
- Newtown Russet** (Cranston Nursery Company), D. Small, flat, golden russet, dry, mid-season; pretty, but useless.
- Ney-Mi**, see Wadhurst Pippin.
- Nicolayer** (Rivers), D. Medium, round, pale green, sweet, mid-season; first quality.
- Nine Square Pippin** (Chisholm), C. Large, round, angular, yellow, flushed red, firm, sweet, mid-season.

- Nine Squares** (Cockbill), see **Nine Square Pippin**.
- † **Niton House** (Veitch), see **Seaton House**.
- No Core** (R.H.S.), C. Medium, round, greenish yellow, flushed red, solid, mid-season.
- No Core** (J. Scott), Small, conical, greenish yellow, streaked; worthless.
- * **Nonesuch**, C. Medium, flat, greenish yellow, red streaked, soft, very acid; third quality; first early; a very pretty Apple and a free bearer.
- Nonesuch** (Saunders), D. or C. Large, round, angular, streaked yellow, mid-season; handsome.
- Nonesuch, Early**, see **Nonesuch**.
- Nonesuch Paradise** (Rivers), C. Small, conical, yellow; worthless; makes an excellent dwarfing stock, for which purpose it is much grown.
- Nonesuch Park** (R.H.S.), D. Small, flat, even, greenish yellow, firm, sweet, mid-season; first quality.
- Nonpareil**, see **Old Nonpareil**.
- Nonpareil** (Ritchie), D. or C. Large, round, angular, streaked yellow, sweet, mid-season; third quality.
- Nonpareil D'Angleterre**, see **Ribston Pippin**.
- Nonpareil Early**, see **Hick's Fancy**.
- Nonpareil Headcorn** (Britcher), D. Small, ovate, light russet, late; third quality.
- Nonpareil, Petworth**, see **Petworth Nonpareil**.
- Nonpareil, Ross**, see **Ross Nonpareil**.
- Nonpareil, Russet**, see **Pitmaston Russet Nonpareil**.
- Nonpareil, Scarlet**, see **Scarlet Nonpareil**.
- Nonpareil, Sweeney**, see **Sweeney Nonpareil**.
- Nonpareil, White**, see **White Nonpareil**.
- * **Norfolk Bearer**, see **Norfolk Beefing**.
- * **Norfolk Beefing**, C. Medium, round, dull bronze, very firm, acid; second quality; late; an excellent late Apple.
- Norfolk Colman**, see **Norfolk Beefing**.
- Norfolk Paradise** (Rivers), D. Small, flat, even, pale green, flushed, firm, acid, late; closely resembles **Wyken Pippin**.
- Norfolk Stone Pippin** (W. Paul & Son), C. Small, ovate, green flushed, acid, late.
- Norfolk Stone or White Pippin** (Browne), D. Small, ovate, green, late; third quality.
- Norfolk Storing**, see **Golden Ball**.
- Norfolk Storing** (Brunton), C. Medium, conical, angular, bronze green, acid, late.
- Normandy Pippin** (Haycock), D. Small, round, greenish yellow, sweet, mid-season; third quality.
- Normanton Bitter-sweet**.
- † **Normanton Broading** (Milne), Medium, oblong, deep green, streaked, late.

- * **Normanton Wonder**, see Dumelow's Seedling.
- North Britain** (Ormiston), C. Medium, flat, angular, yellow, flushed, soft, early; somewhat resembles Yorkshire Beauty.
- Northampton**, see Blenheim Orange.
- Northend Pippin** (Lee), C. Medium, round, angular, green, hard, very acid, late.
- Northern Dumpling** (Roberts), C. Medium, flat, green, flushed bronze, firm, acid, mid-season.
- * **Northern Greening**, C. Medium, ovate, green, flushed, firm, acid, late; first quality; a very fine late Apple.
- † **Northern Greening Improved** (Frettingham). Medium, ovate, green, late; first quality.
- * **Northern Spy** (Wilson), D. Medium, round, red-streaked and flushed, brisk, sweet, white flesh; first quality; a very handsome Apple.
- Norton Bitter**, Cider. Medium, round, bronze green.
- Notch Kernel**, Cider.
- Notts Seedling**, see Pott's Seedling.
- Nutmeg Pippin**, see Cockle's Pippin.
- Oak Apple** (Killick), C. Medium, round, angular, greenish yellow, flushed, sweet, mid-season; stalk very long.
- Oakley Grove Pippin**.
- Oberdieck's Winter Tauben Apfel** (R.H.S.), D. or C. Small, conical, even, pale green, late; worthless.
- † **Ochiltree** (Drummond). Small, deep green.
- Odelson's**, see Kerry Pippin.
- Ogle Grove Pippin** (J. Veitch & Sons), C. Medium, ovate, pale green, flushed, acid, late.
- † **Okera**, see Akera.
- Old Apple**. Small, ovate, light russet.
- Old Bess Pool**, see Bess Pool.
- Old Bromley** (Cockbill), D. or C. Small, conical, yellow.
- Old Caldwell**, see Rymer.
- * **Old English Codlin** (R.H.S.), C. Medium, conical, angular, pale greenish yellow, flushed, early; first quality.
- Old Fox-whelps**, Cider. Medium, round, red-streaked.
- Old Gilliflower** (Moorhouse), D. Large, long conical, even yellow, light bronze, soft, mid-season.
- Old Golden Pippin** (R.H.S.). Small, conical, even, greenish yellow, with russet markings, flesh yellow, firm, sweet, mid-season; first quality; often confused with Yellow Ingestrie and Downton.
- Old Golden Reinette**, see Golden Reinette.
- Old Golden Russet**, see Golden Russet.
- Old Leathercoat Russet**, C. Medium, round.
- Old London Pippin**, see London Pippin.
- Old Man** (Rowson), D. Small, round, green, russet, firm, late; third quality.

- Old **Neddie** (Crossland), D. or C. Small, round, angular, bronze green, very firm, late.
- * Old **Nonesuch**, see Nonesuch.
- * Old **Nonpareil**, D. Small, round, green russety, very firm, brisk, sweet, late ; first quality.
- Old **Northern Greening**, see Northern Greening.
- * Old **Orange Pippin** (Wood & Ingram).
- Old **Pomeroy** (R.H.S.), D. or C. Medium, conical, pointed, streaked yellow with russet, flesh dry, sweet, mid-season ; third quality ; very distinct.
- Old **Queening** (Cranston Nursery Company), C or Cider. Medium, ovate, angular, yellow, flushed red, russet, very firm, very acid.
- Old **Rollisson's** (Hathaway), C. Small, ovate, green.
- Old **Russet** (Saltmarsh), D. or C. Small, conical, angular, yellow, russet, mid-season ; second quality.
- Old **Seek no Further** (Rivers), D. or C. Large, oblong, angular, green, flushed red, mid-season.
- Old **Stone Pippin** (Killick).
- Old **Wife** (S. Ford), Small, conical, angular, light russet ; worthless.
- Old **Winter Pearmain** (Turner), D. or C. Medium, conical, reddish russet, acid, late.
- Old **Winter Russet** (Rivers), C. Medium, round, angular, flushed russet, acid, mid-season.
- Omar Pacha** (R.H.S.), D. Small, round, greenish yellow, flushed bronzy red, dry, mid-season ; second quality.
- Onion Apple** (Ritchie), C. Small, round, pale green, flushed, acid, late ; resembles Dumelow's Seedling.
- Onion Rope** (Warden).
- Open Heart** (Bancroft), Medium, conical, bronze ; worthless.
- Opetien Pommiers** (Wood & Ingram), C. Large, round, bright green, early ; second quality ; very peculiar stalk.
- Orange** (Way), D. Small, flat, orange, mid-season ; third quality ; resembles Oslin.
- Orange Apple** (Rogers).
- Orange Goff**, see Goff.
- Orange Pearmain** (S. Ford), C. Medium, round, green, soft ; worthless.
- * **Orange Pippin** (Graham), D. Small, flat, pale orange, red streaked, sweet, mid-season ; first quality.
- Orange Pippin** (Ritchie), D. Small, round, light russet, mid-season ; third quality ; worthless.
- Orange Quince** (Garland), C. Large, round, angular, streaked yellow, soft, early.
- Orange Russet** (Gould), D. Small, round, light russet, flushed, dry, mid-season ; worthless.

- Orange Wilding** (Rogers), Cider. Small, pointed, conical, yellow, flushed bronze.
- Oranier Pepelin** (R.H.S.), D. Medium, flat, angular, orange, flushed, firm, sweet, mid-season.
- Ord's** (R.H.S.), D. Small, ovate, angular, deep green, sometimes flushed red, with large dark brown spots, brisk and fresh, sweet; first quality, late; a very fine late Dessert Apple.
- Orme**, see Manks' Codlin.
- Ornament de la Table** (R.H.S.), D. Small, round, green, flushed bright red, sometimes streaked; pretty, but worthless.
- * **Oslin** (Brunton), D. Small, flat, orange yellow, with russet specks, firm, sweet, early; second quality; a very free cropping variety.
- Ostendon** (Way), D. or C. Medium, conical, even, dark purple, late.
- Ostogotha** (R.H.S.), D. Small, flat, yellow russet, firm, sweet, mid-season.
- Ostogotha** (Haycock), D. or C. Medium, flat angular, pale green, flushed, flesh white, sweet, mid-season.
- † **Ottershaw** (Cheal), Medium, oval, pale green.
- Oxford Peach**, see Yorkshire Beauty.
- Pace's Seedling** (Morrison), C. Small, conical, angular, pale yellow, firm, mid-season.
- Packhorse Pippin** (Cummins), resembles Pearson's Plate.
- Painted Lady** (Rowson), C. Large, conical, angular, streaked yellow, very hard, late.
- Palmer's Glory**, see Yorkshire Beauty.
- Paradise Pippin**, see Egg or White Paradise.
- Parker** (J. Scott), D. Small, conical, light russet, acid mid-season; third quality.
- Parker's Fame** (Saltmarsh), D. Medium, conical, flushed red, mid-season; third quality.
- Parker's Glory Pippin** (J. Scott), Medium, round, yellow flushed; worthless.
- Parry's Pearmain** (R.H.S.), D. Small, round, green russet, mid-season; second quality.
- Parson's**, see Rymer.
- Passe Böhmer** (J. Scott), C. Small, conical, yellow, flushed red, acid; worthless.
- Paternoster**, resembles Dutch Mignonne.
- Pat's Seedling** (Gilbert), D. Small, flat, angular, red streaked, acid, mid-season; resembles Fearn's Pippin.
- Patrick's** (Brown), C. Small, conical, green, streaked, sweet; worthless.
- Pattiswick Seedling** (R.H.S.), C. Small, round, very angular, bronzy red; worthless.

Pawn Apple (J. Scott), D. Small, round, greenish yellow, sweet, mid-season ; third quality.

Paymaster, Cider. Medium, round, yellow.

Peach (R.H.S.), C. Medium, flat, angular, rosy pink, flesh white, firm, mid-season ; second quality ; a very handsome Apple.

Peach (R. Veitch & Son), D. Large, conical, angular, red streaked, soft, early ; first quality ; a handsome early Apple.

Peach (Saunders), C. Large, flat, red streaked, acid, early handsome.

Peach Bloom (Beaton), see Winter Peach.

Pear Apple (Rogers), Cider. Medium, round, yellow, flushed.

Pearmain Chester, see Golden Reinette.

Pearson's Apple (Graham).

* **Pearson's Plate** (R.H.S.), D. Small, conical or oblong, greenish russet, flushed orange red, firm, sweet, mid-season ; first quality ; resembles Golden Harvey.

* **Peasgood's Nonesuch** (Haycock), C. Very large, conical, even, greenish yellow, flushed and streaked red, soft, acid, mid-season ; first quality ; a very handsome Apple.

* **Peck's Pleasant** (Rivers), D. Large, round, green, late ; first quality.

Pennington Seedling (Dickson), D. Medium, flat, green or yellowish green, russety, brisk, late ; first quality.

Pennock's Red Winter (Rivers), C. Medium, round, angular, green streaked, acid, late.

Penny Loaf (R.H.S.), C. Medium, flat, angular, flushed yellow, mid-season ; resembles Old English Codlin.

Perkins' Seedling (F. C. Ford), C. Medium, round, angular, green, very acid, late.

Peter Smith (Paul & Son), D. Small, yellow, conical, mid-season ; third quality.

Peter the Great (Kidd).

Petit Jean (Saunders), C. Small, round, small eye, streaked yellow, mid-season.

Petworth Nonpareil (Dean), D. Small, round, uniform, grey russet, flesh green, sweet, mid-season.

Pheasant's Eye, see Wyken.

Phillip's Pippin (Cranston Nursery Company), C. Medium, round, greenish yellow, streaked, hard, mid-season.

Phillip's Seedling, see Cellini.

Pickering's Pearmain (Brunton), D. Medium, flat, flushed russet, acid, late ; second quality.

Pie-finch, Cider. Large, flat, red streaked.

Pigeon or Wax Apple, see Wax Apple.

Pigeon Rouge (J. Scott).

Pigeon's Heart (R.H.S.), D. Medium, round, green, streaked ; worthless.

- * **Pigéonette** (Rivers), D. Small, conical, light bronze, white flesh, mid-season ; third quality.
- Pig's Nose** (J. Veitch & Sons), Cider. Medium, conical, with peculiar flattened sides, pale green, flushed red.
- Pike's Pearmain**, see King of the Pippins.
- Pile's Russet**, see Hambledon Deux Ans.
- Pile's Russet** (Rivers), D. or C. Medium, flat, angular, grey russet, late ; second quality.
- Pile's Victoria**, see Devonshire Buckland.
- † **Pinder's Apple** (Grey), resembles Keswick Codlin.
- Pine Apple Pippin** (J. Veitch & Sons), D. Small, ovate, bronzy red, soft, acid, mid-season ; pretty, but worthless.
- Pine Apple Pippin**, see Hambledon Deux Ans.
- * **Pine Apple Russet** (Cranston Nursery Company), D. Large, round, angular, light grey, flaked with russet, flushed, soft, very tender, sweet, early ; first quality ; also called Pomeroy.
- Pine Apple Russet**, see Pine Golden Pippin.
- Pine Golden Pippin** (R.H.S.), D. Small, roundish, angular, light grey russet, flesh white, tender, sweet ; first quality, mid-season.
- Pippin Kuculies** (J. Scott), Cider. Small, round, red-streaked.
- Pippin Morningthorpe** (J. Scott).
- Pitcher Burr Knot** (Griffin), D. Small, flat, yellow, early ; worthless.
- Pitmaston Golden Pippin** (R.H.S.), D. Small, conical, pale yellow, flaked with russet, firm, sweet, mid-season ; first quality.
- Pitmaston Pine Apple** (R.H.S.), D. Small conical, even, pale golden netted russet, flesh yellow, firm, sweet, mid-season ; first quality.
- * **Pitmaston Russet** (Penny), see Pitmaston Russet Nonpareil.
- Pitmaston Russet Nonpareil** (R.H.S.), D. Medium, round, flattened, pale green, flaked with russet, flushed, sweet, mid-season ; first quality.
- Pittsburg Seedling** (Turner), D. Small, conical, yellow, flushed, firm, late ; worthless.
- Please Lady** (Doig), D. Small, ovate, pale green, mid-season ; second quality.
- Plum Apple** (Kidd), C. Small, conical, angular, pale red, flushed ; worthless.
- Plum Vite** (Rogers), C. Small, conical, yellow flushed.
- Plum Water** (Shortt), C. Medium, conical, angular, red flushed, soft, early ; inferior.
- Pomeroy**, see Red Astrachan.

- Pomeroy of Somerset** (W. Paul & Son), see Old Pomeroy.
- Pomeroy Russet**, see Pine Apple Russet.
- Pomme d'Api**, see Lady Apple.
- Pomme de Lippé**, see Ornement de la Table.
- Pomme de Neige** (R.H.S.), D. Small, round, white, flushed bright scarlet, flesh white, soft, sweet, mid-season; second quality; exceedingly pretty.
- Pomme de Pâque** (Rivers), D. or C. Medium, conical, streaked yellow russet, acid, mid-season.
- Pomme Grise** (W. Paul & Son), D. Medium, conical, angular, streaked yellow, acid, mid-season; worthless.
- Pomme Poire Blanche** (R.H.S.), C. Medium, round, angular, green, late; stalk very long.
- Pomme Royale**, see Royal Russet.
- Pomme Russet**, see Reinette de Hollande.
- Pomme Violette** (Pragnell), C. Large, flat, open eye, dark purple, late; resembles Mère de Ménage.
- Pomme Water** (R.H.S.), D. or C. Medium, round, angular, green, late, mawkish sweet; worthless.
- Pomona**, see Cox's Pomona.
- Pompone Pippin**, see Bringewood Pippin.
- Pond Pippin** (Britcher), D. Small, round, red, streaked, sweet, early; third quality.
- Ponto Pippin** (R.H.S.), D. Small, round, green russet, late; third quality.
- Poor Man's Friend**, see Warner's King.
- Poor Man's Profit** (Garland), D. or C. Small, round, yellow, streaked; worthless.
- Pope's Apple** (Lane), D. or C. Medium, conical, even, eye large, pale yellow, flushed, soft, mid-season; a very handsome Apple.
- Porter's Pippin** (Saltmarsh), C. Large, conical, even, streaked yellow, firm, acid, late; very handsome.
- Portugal Blue** (Ritchie), Cider. Medium, flat, angular, bronze green, late.
- Postans** (Ritchie), Small, conical, flushed yellow; worthless.
- Postrophe**, see Blenheim Orange.
- Pott's Seedling** (Lane), C. Large, oblong, angular, pale yellow, early; first quality; a very free bearer.
- * **Pound Apple** (J. Scott), C. or Cider. Medium, flat, light, copper-coloured, flushed, sweet.
- * **Pound Apple**, see Whittle's Dumpling.
- † **Pounds**, see Pound Apple.
- Powell's Favourite** (Wright), D. Medium, conical, even, yellow, acid, mid-season; third quality; a pretty little Apple.
- Powell's Russet** (R.H.S.), D. Small, round, green, russet, dry flesh, mid-season.

Pratt's Pudding, see Pott's Seedling.

Premier (Killick), D. or C. Medium, flat, red, streaked, soft, mid-season.

Président de Fays-Dumonçeau (Paul & Son), C. Large, conical, angular green, late, mawkish sweet.

Price's Rolly Crown (Pearson), Cider. Medium, round, green flushed.

Pride of Easton (Gilbert), D. or C. Large, conical, yellow, streaked, soft, mid-season; handsome.

Pride of Normandy (Cranston Nursery Company), Cider. Small, conical, flushed bronze.

Pride of the Mill (Cheal).

Pride of the Orchard (Chorley).

* **Prince Albert**, see Lane's Prince Albert.

* **Prince Bismarck** (McIndoe), see Bismarck.

Prince Henry (Slater), D. or C. Medium, round, streaked, yellow, soft, sweet, mid-season.

Prince Lippo (Paul & Son), Small, flat, red, streaked, mid-season; worthless.

Prince of Wales (Jones), C. Medium, round, even, pale green, flushed, acid, late, flesh white; somewhat like Dumelow's Seedling.

Prince of Wales (Miles), resembles Blenheim Orange.

* **Prince's Pippin**, see King of the Pippins.

Prince's Pippin (Poynter), Cider. Large, flat, even, bright red; very beautiful.

Princess Augusta (J. Veitch & Sons), D. or C. Medium, round, yellow, mid-season; third quality.

Princess Royal (R.H.S.), D. Small, round, russet, late; second quality.

Prinzen Apfel (R.H.S.).

Prizetaker (Turner), C. Medium, flat, yellow, soft, acid; resembles Ecklinville Seedling.

Profit Apple (Saunders), Cider. Large, round, angular, yellow streaked.

Prolific July Apple (Cummins), D. Very small, conical, yellow, streaked, early; second quality.

Prophet.

Prussian Pippin (Crossland), D. Small, ovate, yellow, very hard, late.

Puckrupp's Pippin (Dicksons), D. Medium, conical, grey russet.

Pudding Apple, see Hambleton Deux Ans.

Puffin Sweet, or **Come Bear and Tear** (Poynter), Cider. Large, broad, conical, streaked, greenish yellow; resembles Emperor Alexander.

Purpurother Agat-Apfel (R.H.S.), C. Medium, ovate, greenish yellow, streaked, acid, late.

Pursemouth (King), Small, conical, very angular, pale yellow, flushed red, dry, mid-season; worthless.

Pym Square (Cranston Nursery Company), Cider. Large, flat, red, streaked; a very beautiful Apple.

* **Quarrenden**, see Devonshire Quarrenden.

Quart Apple (Slater), D. Medium, flat, greenish yellow, flushed orange; worthless. This variety has frequently double crowns.

* **Quatford Aromatic** (R.H.S.), D. Medium, conical, angular, flushed yellow russet, brisk, sweet, mid-season.

Queen, The, see The Queen.

* **Queen Apple** (Shingles), D. or C. Large, oblong, eye large, deep, streaked, yellow russet, soft, mid-season; a very distinct looking Apple.

Queen Apple, see Fairy.

* **Queen Caroline** (Jones), C. Medium, flat, even, large open eye, pale yellow, dry; second quality; early; somewhat resembles Golden Noble.

Queen Mary, see Duchess of Oldenburg.

Queen of England (Graham).

Queen of the Pippins (Cairns).

Queen Victoria (Fletcher).

Queen's (R. Veitch & Son), C. or Cider. Medium, oblong, dark red, streaked, soft, flesh tinged red.

Queen's Crab (Crossland), C. Medium, oblong, angular, yellow flushed, dry, early; worthless.

Queen's Russet (Pearson), D. Small, round, light russet; worthless.

Queenstown (Crossland), C. Medium, round, greenish yellow, very acid, late.

Quetier (Rivers), C. Medium, round, very small eye, greenish yellow, soft, mid-season.

Radford Beauty (R. Veitch & Son), C. Medium, round, bronze green, streaked, firm, acid, late.

Ramboro (Cummins), D. or C. Medium, conical, flushed yellow, firm, sweet, mid-season.

Rambour (Cheal), C. or Cider. Large, flat, dark red, streaked, mid-season.

Rambour d'Amérique (Moorhouse), D. or C. Medium, conical, green flushed, very firm, late; Mère de Ménage of some.

Rambour d'Hiver (G. Bunyard & Co.), C. Large, flat, angular, very large deep eye, green, acid, late.

Rambour Lattischers (J. Scott), C. Medium, round, bronze green, russet, very firm, late; worthless.

Rambour Pepelin (Rivers), C. Medium, oblong, green, flushed, very acid, mid-season.

Ramsdell's Sweet (Rivers), D. Small, conical, angular, yellow, sweet, mid-season; worthless.

Ramsden's, see Norfolk Beefing.

Ranson (Harrison), C. Medium, round, green, streaked, soft, mid-season ; third quality.

Rawle's Reinette, see Dutch Mignonne.

- * **Ravelston Pippin** (McKinnon), D. or C. Large, roundish, angular, greenish yellow, red, streaked with russet, mid-season ; a favourite Scotch Apple.

Red American, see Pomme de Neige.

- * **Red Astrachan**, D. Medium, round, deep scarlet, with dense grey bloom, flesh white, firm, brisk acid, first early ; second quality ; a very handsome Apple, but shy bearer.

- * **Red Autumn Calville** (Garland), see Calville Rouge d'Automne.

Red Beefing, see Norfolk Beefing.

Red Bitter Sweet (Ritchie), Cider. Small, conical, pale yellow, flushed.

Red Blandon, see Calville Rouge d'Automne.

- * **Red Bough** (Dunn), D. or C. Medium, long conical, yellow, red streaked, flesh soft, white.

Red Busbelly (Garland), Cider. Small, conical, angular, red flushed.

Red Cadbury (S. Ford), D. Small, conical, red streaked, soft, early.

Red Calendar (Brunton), D. or C. Small, conical, red streaked, early ; third quality ; pretty, resembles Colonel Vaughan.

Red Cluster (Garland), Cider. Small, flat, angular, red.

Red Coachman, see Colonel Vaughan.

Red Dick (Lane), Cider. Medium, conical, angular, bright red, very acid.

Red Flanders, see Hollandbury.

Red German, see Mère de Ménage.

Red German (Cranston Nursery Company).

- * **Red Hawthornden**, see Old Hawthornden.

Red Itterly Bitter Sweet (Ritchie), Cider. Very small, round, even, yellow, flushed.

- † **Red Julien** (Dickson & Co.)

Red Juneating (Ormiston), D. Small, ovate or conical, red streaked, sweet, first early ; a very nice early Apple.

Red Kaine (Walker), C. Medium, conical, angular, pale green, streaked red, soft, early.

Red Leadington, D. or C. Medium, conical, pale green, bronzed, late.

Red Must (Cheal), D. Small, conical, red, flushed, acid, mid-season ; pretty, but worthless.

Red Norman, Cider. Small, conical, flushed, yellow.

Red Norman Bitter Sweet, see Yorkshire Beauty.

- † **Red Peach** (R. Veitch), Medium, conical, streaked.

- Red Quarrenden**, see Devonshire Quarrenden.
- Red Rawlings** (Harrison), Cider. Round, even, dark red, streaked, flesh tinged red.
- Red Ribbed Greening** (R. Veitch & Son). Large, conical, angular, green flushed, bronze, acid, mid-season ; worth less.
- Red Ribbed Queen** (R. Veitch & Son), C. or Cider. Medium, ovate, angular, deep red, streaked, mid-season.
- Red Russet** (Rivers), D. Large, round, angular, red russet, mid-season ; second quality.
- Red Shannon**, see Hanwell Souring.
- Red Soldier** (Ritchie), Cider. Small, conical, angular, yellow, flushed red.
- Red Stone** (Robertson), D. or C. Large, flat, angular, red, streaked, mid-season ; third quality.
- Red Strawberry** (Ritchie), Cider. Medium, round, streaked yellow.
- Red Streak Pippin**, see Kerry Pippin.
- Red Streaks** (S. Ford), Cider. Medium, round, dark red, streaked.
- Red Styre** (Cranston Nursery Company), Cider. Small, round, even, yellow, streaked.
- Red Winter Bitter Sweet**, Cider. Small, conical, yellow, flushed.
- Red Winter Pearmain** (Roberts), C. or D. Medium, conical, even, green, streaked, acid, late.
- Red Winter Reinette of Schmidtbergen** (R.H.S.), D. Medium, round, yellow, streaked, mid-season ; worthless.
- Redding's Nonpareil** (R.H.S.), D. Small, round, light russet, late.
- Redleaf Russet** (W. Paul & Son), see Cox's Red Leaf Russet.
- Reinette d'Ananas**, see Pitmaston Pine Apple.
- Reinette d'Allebearer** (?) (J. Scott), D. Medium, round, yellow streaked.
- * **Reinette Baumann**, see Baumann's Red Winter Reinette.
- Reinette Blanche d'Espagne** (Dickson), C. Large, round or flattened, angular, greenish yellow, flushed, mid-season first quality.
- Reinette de Breda** (Pragnell), D. Medium, round, greenish yellow, russety, firm, mid-season ; third quality.
- * **Reinette de Canada**, D. or C. Large, flat, angular, greenish yellow, flaked, russet, firm, sweet, mid-season ; first quality ; a very fine Apple, if grown in good situations.
- Reinette de Canterbury** (Rivers), C. Medium, round, angular, green, very firm, late.
- Reinette Carmelite**, see Downton.

- * **Reinette de Caux**, greatly resembles Dutch Mignonne.
- Reinette Damies** (J. Scott), D. Small, round, greenish yellow, acid, mid-season; third quality.
- Reinette Doré** (Rivers), D. or C. Medium, round, green, late; worthless.
- Reinette d'Espagne** (Haycock), D. Small, round, light russet, sweet, mid-season; second quality.
- Reinette Franche**, see Old Nonpareil.
- Reinette Gaesdouk** (J. Scott), Small, round, greenish yellow; worthless.
- Reinette de Granville** (Haycock), D. or C. Medium, round, greenish yellow, mid-season; second quality.
- Reinette de Greville** (R.H.S.), C. Medium, round, angular, greenish yellow, firm, sweet, early.
- * **Reinette Grise** (Rivers), D. Medium, round, flattened, greenish yellow, russet, late; first quality.
- **Reinette Grise d'Automne**, see Reinette de Canada.
- Reinette Grise de Canada**, see Reinette de Canada.
- Reinette Grise de Champagne** (J. Veitch & Sons), D. or C. Medium, flat, uniform, light grey russet, flesh greenish, sweet, mid-season; second quality.
- Reinette de Hollande** (Haycock), D. Medium, round, orange yellow, streaked, mid-season; like a small King of the Pippins.
- Reinette Impératrice**, see Dutch Mignonne.
- Reinette Jaune Hâtive** (Kidd), resembles Gravenstein.
- Reinette Kapuziner** (R.H.S.), D. Small, flat, light grey russet, flushed, mid-season; second quality.
- Reinette Livery** (J. Scott), C. Medium, conical, green, acid, soft, mid-season; worthless.
- Reinette Luisante** (J. Veitch & Sons), D. or C. Medium, round, yellow, mid-season; second quality.
- Reinette de Madère** (Rivers), D. Medium, round, yellow, early; second quality.
- Reinette du Nord**, resembles Old English Codlin.
- Reinette Oberdieck** (Pragnell), C. Small, round, greenish yellow, late; worthless.
- Reinette Ontz** (Lane), D. Medium, round, uniform grey russet, acid, mid-season; very poor.
- Reinette Ontz** (J. Veitch & Sons); resembles an early Claygate Pearmain.
- Reinette Perle**, see Golden Winter Pearmain.
- Reinette Petite Grise** (Cummins), D. Medium, round, green, late; third quality.
- † **Reinette Rambour de Melcher** (Rivers), Large, round, pale yellow, firm, late.
- Reinette Roequin** (Rivers), D. Medium, flat, yellow, russet sweet, late; worthless.

- Reinette Superfin** (J. Scott), D. Medium, flat, angular, green, late ; first quality.
- Reinette Thorley** (Haycock), D. or C. Medium, conical, yellow, firm, mid-season ; third quality.
- Reinette très tardive**, see Winter Pearmain.
- * **Reinette Van Mons** (J. Veitch & Sons), D. Medium, round, yellow, russet, brisk acid, early.
- Reinette de Versailles**, see Lemon Pippin.
- Reinette de Vervaeue** (J. Scott), Small, flat, green, bronze ; worthless.
- Reinette du Vigan** (J. Scott), D. Medium, flat, angular, flushed red, mid-season ; third quality.
- Reinette von Zongoliet** (J. Scott), D. Small, flat, greenish russet, late ; third quality.
- † **Remborough** (Cummins), resembles King of the Pippins.
- Rendell's Pippin** (Poynter), see Court of Wick.
- Rhode Island Greening** (R.H.S.), D. or C. Medium, round, angular, green, firm, acid ; first quality ; a very fine, late keeping Apple.
- Rhydd Court Seedling** (Cranston Nursery Company). Similar to Golden Reinette.
- Rib Apple** (S. Ford), Small, oblong, yellow, flushed ; worthless.
- * **Ribston Pippin**. Medium, round, angular, greenish yellow, flushed and streaked red, flesh yellow, firm, mid-season ; first quality ; very highly flavoured.
- Ribston Pearmain**, see Claygate Pearmain.
- Richard Gilbert** (Gilbert), D. Medium, round, reddish orange, soft, mid-season ; pretty.
- † **Ringer** (Smith), C. Large, oblong, angular, pale yellow, soft, early ; first quality.
- Risomer** (Britcher), D. Small, round, red streaked, sweet, early ; third quality.
- Robinson's Pearmain** (Pragnell), C. Medium, conical, yellow, acid, mid-season ; third quality ; pretty, but worthless.
- Robinson's Pippin** (J. Veitch & Sons), D. Small, round green, russet, late ; first quality.
- Rock** (J. Scott), D. Small, round, yellow flushed, late ; worthless.
- Rock Apple** (King), D. Small, conical, yellow, flushed.
- Roi d'Angleterre** (Haycock), C. Medium, round, green, late.
- Rolland Apple** (J. Dean), D. or C. Large, conical, angular, yellow, streaked, acid, mid-season.
- Romeril** (Saunders), D. or C. Medium, flat, green, flushed, mid-season ; worthless.
- Ronald's Orange Pippin** (R.H.S.), D. Small, round, yellow, mid-season ; third quality.
- Ronald's Royal Pearmain**, see Autumn Pearmain.

Rosehill Pearmain (Griffin).

- * **Rosemary Russet**, D. Medium, conical, greenish yellow, russet, flushed red, firm, acid, mid-season ; first quality.

Rosenhager (R.H.S.), D. or C. Medium, flat, reddish bronze, firm, sweet, late ; first quality.

- * **Ross Nonpareil** (R.H.S.), D. Small, round, pale russet, flushed and streaked red, very firm, brisk, sweet ; first quality.

- * **Rostocker** (R.H.S.), C. Medium, round, angular, bright red shaded, very firm, late ; first quality ; a very pretty Apple.

Rosy Red (J. Scott), D. Small, flat, red, mid-season ; third quality.

Rother Eisen, see Hunt's Royal Red.

- † **Rougemont** (R. Veitch).

Rough Coat Russet (Cranston Nursery Company), D. Small, flat, russet, flushed, dry, mid-season ; worthless.

Rough Pippin, see Adams' Pearmain.

Rough Thorn, Cider. Small, round, angular, greenish russet.

Round Apple (Rogers).

Round Codlin (R.H.S.), C. Medium, round, angular, greenish yellow, firm, mid-season.

Round Winter Codlin, see Round Winter Nonesuch.

- * **Round Winter Nonesuch** (R.H.S.), C. Large, round, angular, with large prominent eye, greenish yellow, streaked, late ; first quality ; a fine handsome Apple, and a free bearer.

Roundway Magnum Bonum (Rivers), C. Medium, round, pale yellow, covered with minute grey spots, soft, early ; very distinct.

Rowell's Captain (Gilbert), D. or C. Medium, round, red streaked, mid-season ; a very pretty Apple.

Rowell's Lieutenant (Gilbert), D. or C. Medium, conical, pale green, mid-season.

Rowell's Middy (Gilbert), C. Medium, conical, even, greenish yellow, flushed, firm, acid, late.

Roxbury Russet (Rivers), D. Small, flat, greenish russet, firm, sweet, late.

- * **Royal Codlin**, C. Large, conical, angular, greenish yellow, flushed red, early ; first quality ; a very handsome Apple.

Royal George (Poynter), C. Large, conical, angular, purplish red streaked, soft, white flesh, mid-season, first quality ; very handsome.

Royal Jersey (Poynter), Cider. Medium, conical, red streaked.

- † **Royal Jubilee** (Bunyard), C. Large, conical, pale yellow, flushed, firm, melting, mid-season ; first quality ; resembles Manks' Codlin.

Royal Pearmain, see Old Winter Pearmain.

Royal Red Streak (Crossland).

- * **Royal Russet**, C. Large, round, grey russet, mid-season ; first quality.
- Royal Shepherd** (Cockbill), Medium, conical, green, flushed red ; worthless.
- * **Royal Somerset** (Garland), C. Medium, flat, even, very pale green, acid, late ; first quality ; handsome ; somewhat resembles Dumelow's Seedling.
- Royal Wilding** (Cranston Nursery Company), D. Small, flat, streaked russet, mid-season ; third quality.
- Royal Wilding**, Cider. Medium, conical, green, flushed.
- Ruck's Late Nonesuch** (Pollett), D. or C. Medium, oblong, green, streaked, acid, mid-season ; third quality ; resembles King of the Pippins.
- Rushout**, D. Small, round, greenish yellow, dry, late ; third quality.
- * **Rushock Pearmain**, resembles Sturmer Pippin.
- Russet Nonpareil**, see Pitmaston Russet Nonpareil.
- Russet Pearmain** (Ritchie), D. Small, flat, russet, acid, late ; worthless.
- Russet Pine**, see Pine Apple Russet.
- Russet**, Pine Apple, see Golden Reinette.
- * **Russet Pippin**, see Cox's Orange Pippin.
- Russian Emperor**, see Emperor Alexander.
- * **Russian Transparent**, see Scorpion.
- Rust Cove** (Beaton), Medium, conical, angular, reddish russet ; worthless.
- Rusty Coat** (Rogers), D. Small, flat, netted russet, late ; worthless.
- Rutlandshire Foundling**, see Golden Noble.
- * **Rymer** (R.H.S.), C. Medium, flat, large open eye, greenish yellow, streaked and flushed red, firm, acid, late ; first quality ; a great cropper.
- Sack Apple**, Cider. Small, conical, angular, streaked yellow.
- Sack Apple** (Ritchie), Cider. Small, round, streaked red.
- Sage**, No. 1 (R.H.S.), C. Medium, oblong, angular, yellow, occasionally flushed, early ; second quality.
- Salmon Apple** (King), C. Large, flat, angular, streaked yellow, early.
- Sam Young** (R.H.S.), D. Small, flat, large open eye, light grey russet, flesh yellow, sweet, mid-season ; first quality ; in appearance like a Medlar.
- Sam's Crab** (Cranston Nursery Co.), D. or C. Medium, round, greenish yellow, streaked red, mid-season ; third quality.
- Sarah Sinoy** (Rivers), D. or C. Medium, round, flattened, greenish yellow, flushed, very firm, acid, mid-season.
- Saunders' Jersey Pippin**, see Hammond's Jersey Pippin.
- Saville's Seedling** (Pollett), D. Small, round, angular, greenish yellow, sweet, mid-season ; worthless.

- Saxon** (Dunn), C. Small, ovate, pale yellow, soft, early ; worthless.
- * **Scarlet Admirable** (Lane), D. Small, round, streaked yellow, early ; third quality ; resembles Duchess of Oldenburg.
- Scarlet Crofton** (Wheeler), D. Small, flat, yellow russet, flushed, mid-season ; first quality.
- Scarlet Golden Pippin** (Rivers), D. Small, conical, golden russet, streaked, dry, sweet, mid-season ; resembles Court of Wick.
- Scarlet Incomparable**, see Colonel Vaughan.
- Scarlet Leadington** (Turner), C. Medium, conical or angular, greenish yellow, flushed scarlet, firm, acid ; first quality ; like a small Red Catshead.
- * **Scarlet Nonpareil**, D. Medium, round, greenish yellow, flushed deep scarlet, firm, sweet, late ; first quality ; a very fine and handsome Apple.
- Scarlet Pearmain** (Selwood), C. Medium, conical, angular, red streaked, mid-season ; worthless.
- * **Scarlet Pearmain**, D. Medium, conical, red, acid, mid-season ; third quality ; very handsome.
- Scarlet Pearmain**, D. Small, ovate, red streaked, mid-season ; resembles Colonel Vaughan.
- Scarlet Pippin** (Gilbert), D. Medium, conical, yellow, streaked red, acid, mid-season ; second quality ; resembles Autumn Pearmain.
- Scarlet Pippin** (Cockbill), D. or C. Medium, conical, flattened, large open eye, scarlet, acid, mid-season ; third quality ; a very handsome Apple.
- Scarlet Reinette** (Cockbill), D. Medium, conical, even, large eye, red streaked, sweet, mid-season ; first quality ; very handsome.
- Scarlet Russet** (Harding), D. Small, conical, yellow russet, flushed red, firm, sweet, mid-season ; first quality.
- Schlesvig Jordbaeræble** (R.H.S.), D. or C. Medium, conical, even, greenish yellow, streaked, early, sweet ; first quality ; somewhat resembles Cellini.
- * **Schoolmaster** (Layton), C. Large, oblong, pale yellow, flushed, flesh white, soft, acid, mid-season ; first quality ; handsome.
- * **Scotch Bridget** (Hathaway), C. Medium, conical, angular, green, streaked and flushed red, flesh white, tender, sweet mid-season ; a favourite Scotch Apple.
- Scorpion** (G. Bunyard & Co.), C. Large, flat, angular, stalk deeply set, greenish yellow, mid-season ; first quality ; a very fine Culinary Apple.
- Scranch Apple** (Ritchie), Cider. Large, round, angular, streaked yellow.
- Screveton Golden Pippin** (R.H.S.), D. Small, round, yellow, flaked russet, firm, sweet, mid-season.

- Seacliffe Hawthornden** (Gilbert), C. Small round, angular, yellow, firm, sweet, juicy, mid-season.
- Seale's Beauty** (Britcher), resembles Macdonald's Favourite.
- Seale's Winter Pippin**, see Tower of Glamis.
- † **Seaton House** (Veitch), C. Large, round, flattened, pale green, streaked, mid-season; a very pretty Apple.
- Seek no Further**, see King of the Pippins.
- Seigende Reinette** (R.H.S.), D. or C. Large, conical, even, greenish yellow, streaked, firm, mid-season; first quality.
- Sell's Bainton Seedling** (Gilbert), resembles Yorkshire Beauty.
- Sell's Prolific** (Gilbert), C. Small, conical, red-streaked, acid, mid-season; worthless.
- Selling Pippin**, see Cellini.
- Selwood's Reinette** (Lane), D. or C. Medium, round, angular, yellow, firm, sweet, mid-season.
- † **September Beauty** (Veitch), Early, red, streaked.
- Serinkia** (Rivers), D. Small, round, clear pale yellow, sweet, mid-season; first quality; a very pretty Apple.
- Serinkia**, see Rhode Island Greening.
- † **Sharleston Pippin** (Chuck), Small, green.
- Sharp's Apple** (Cheal), C. Medium, flat, light russet, acid, late; worthless.
- Sharp's Favourite** (Britcher), D. Small, round, yellow, flushed; worthless.
- Sharp's Pippin** (Griffin), D. Small, round, yellow, flushed; worthless.
- * **Sharper's Apple** (Garland), D. Small, ovate, red streaked.
- Sheep's Head** (King), C. Large, conical, very angular, pale green, flushed red, soft early. Resembles Royal Codlin.
- Sheep's Nose** (J. Scott), C. Medium, long, conical, angular green, streaked red, mid-season.
- Sheep's Nose**, C. or Cider. Medium, conical, angular, bright red, streaked, soft, sweet, mid-season.
- Sheep's Nose**, Cider. Medium, conical, pale green.
- Shepherd's Fame** (Rowson), C. Large, conical, pale green, flushed, acid, mid-season.
- Shepherd's Newington** (R.H.S.), C. Medium or large, flat, greenish yellow, streaked, soft, mid-season.
- Shepherd's Seedling** (Gee), D. or C. Medium, conical, green, russet, acid, mid-season; third quality.
- Shepherd's Wilding** (Cockbill), Cider. Medium, round, green.
- Sherlocks** (S. Ford), C. Medium, conical, even, greenish russet, streaked, sweet, mid-season.
- Shiner** (Bancroft).
- Shipley Pippin** (S. Ford), C. Medium, conical, green; worthless.
- Shoreditch Whites**, see Hawthornden.

Shorter. Small, round, green; worthless.

Short's Favourite (Rowson).

Showet.

Siberian Crab (Paul & Son). Small, ovate, orange, flushed red; a very ornamental fruit.

Siberian Sugar.

Silver Pippin, see **Small's Admirable**.

- * **Silver Saturday** (King), C. Small, conical, yellow, streaked, acid; worthless.

Silver Tankard (Ritchie), C. Large, oblong, angular, pale green, acid, mid-season.

Silverton Pippin, see **Warner's King**.

Sir John's Favourite (R. Veitch). Medium, oblong, green flushed.

Sir Walter Blackett's Favourite (Grey), C. Medium, flat, angular, large open eye, green, bronzed, firm, acid, mid-season.

Skinner's Seedling (Cummins), D. Small, conical, green, mid-season; second quality.

Skyrme's Kernel, Cider. Small, round, yellow streaked.

Slack-my-Girdle (R. Veitch & Son), Cider. Large, round, greenish yellow, streaked red; a very pretty Apple.

Sleeping Beauty (Rowson), C. Small, conical, pale green, acid, late; first quality.

Sleeping Beauty (Latta), Cider. Small, round, yellow, mid-season.

Small Catshead (Poynter).

- * **Small's Admirable** (R.H.S.), C. Medium, round, pale green, acid, mid-season; first quality; a very free cropping variety.

Small's Golden Pippin (Bridgman), D. Small, flat, yellow russet, flushed, firm, brisk, mid-season; first quality.

Small's Imperial, see **Small's Admirable**.

Small's Incomparable (Kidd). Small, ovate, greenish yellow; worthless.

Smart's Prince Albert, see **Smart's Prince Arthur**.

- * **Smart's Prince Arthur** (G. Bunyard & Co.), D. or C. Large, long ovate, angular, green, red streaked, very firm, late; a handsome Apple.

- * **Smiling Beauty**, see **Hambledon Deux Ans**.

Smiling Mary, see **Fearn's Pippin**.

- * **Smith's Pippin** (R. Smith & Co.) C. Medium, flat, pale green, flushed, acid, mid-season.

Smith's Seedling, see **Tibbett's Pearmain**.

Snort Apple (Ritchie).

Soger Jersey (J. Scott), Cider. Small, round, red streaked.

Soldier (R. Veitch & Son), Cider. Medium, round, red streaked.

Somerset, see **Royal Somerset**.

- Somerset Apple Royal**, see Winter Pearmain.
- Somerset Lasting**, see Royal Somerset.
- Somersetshire Deux Ans**, see Hambleton Deux Ans.
- Sops in Wine** (R.H.S.), D. or C. Small, round, angular, scarlet, with thick bloom ; flesh streaked red, soft ; third quality ; early, pretty.
- Sour Reinette** (Garland), D. Small, conical, yellow russet, brisk acid, mid-season.
- Souring Apple**, see Dumelow's Seedling.
- South Carolina** (Shingles), C. Large, round, green, red streaked, late ; resembles Hoary Morning.
- South Carolina Pippin** (Pearson), D. Small, round, yellow flushed, acid, mid-season ; third quality.
- South Quoining** (Ritchie), Cider. Medium, conical, red streaked.
- South Quoining**, Cider. Medium, ovate, streaked yellow.
- Sovereign** (Morrison), D. Small, conical, yellow russet, flushed, mid-season.
- Spaniard** (Benson).
- Spanish Green** (Crossland).
- Spanish Pippin**, see Gloria Mundi.
- Spanish Pippin**, see Sellwood's Reinette.
- * **Spencer's Favourite**, see Queen Caroline.
- Spencer's Green Seedling** (R.H.S.), D. Small, flat, green, bronze, sweet, mid-season ; second quality.
- Spencer's Seedling**, see Queen Caroline.
- Spice Apple** (Jefferies), Cider. Medium, round, angular, grey russet.
- Spice Apple of Burntisland** (McKinnon), D. Small, conical, angular, grey russet, soft, sweet, mid-season.
- Spice Russet** (Warland), C. Medium, round, angular, grey russet ; worthless.
- Spreading Norman** (Cranston Nursery Company), Cider. Small, conical, yellow, flushed, russety.
- Spring Grove Codlin** (Pearson), C. Medium, conical, angular, pale green, flushed, early ; third quality.
- * **Spring Ribston**, see Baddow Pippin.
- Springfield Pippin** (Cummins), C. Small, conical, angular, green, late.
- Squire's Codlin** (J. Scott), C. Small, roundish ovate, pale green, sweet ; worthless.
- St. Alban's Pippin** (J. Veitch & Sons), D. Medium, conical, eye large open, green russet, firm, late ; second quality.
- * **St. Lawrence** (C. Turner), C. Medium, flat, red, streaked, soft, sweet, early.
- St. Lawrence** (R.H.S.), C. Medium, round, angular, green, flushed red, acid, mid-season.
- St. Leonard's Nonpareil** (S. Ford), D. Medium, round, russet, soft, mid-season ; third quality.

- St. Mary's Street** (Gilbert), D. Medium, round, angular, russet, streaked, soft, acid, mid-season; greatly resembles Cornish Aromatic.
- St. Sauveur**, see Calville St. Sauveur.
- * **Stackpool Apple** (Saltmarsh), D. or C. Small, conical, green, very late; will keep for two years fresh.
- Stadden's Pippin** (Poynter), Cider. Small, round, angular, dark red, flesh tinged red.
- Stadway Pippin**, see Bess Pool.
- * **Stamford Pippin** (Pearson), C. Medium, round, green, late; first quality.
- Stamford Pippin** (Robertson), C. or D. Medium, round, red streaked, early.
- Stamford Pride** (Gilbert).
- Stark** (Jones), D. Medium, round, green, late; second quality.
- Staten** (Poynter), D. Medium, round, greenish yellow, late; third quality.
- Stead's Reinette** (Wood & Ingram), D. Medium, round, red, sweet, early; third quality; a very pretty Apple.
- Stenkyrsaeble** (R.H.S.), D. or C. Medium, round, angular, greenish yellow, tender flesh, early; first quality.
- † **Stent's Incomparable** (Frettingham). Small, round, green flushed, red, late, large open eye.
- Stewart's Kernel** (Cranston Nursery Company), Cider. Medium, flat, dark red, streaked.
- Stewart's Reinette** (Cranston Nursery Company).
- Stewart's Seedling** (Fairgrieve), C. Medium, conical, green, soft; worthless.
- * **Stirling Castle** (R.H.S.), C. Large, round, flattened, eye deeply set, greenish yellow, acid, soft, mid-season; first quality; a wonderfully free cropper.
- Stock Leadington**, see Catshead.
- Stoffell's Michlin** (R.H.S.), D. or C. Medium, round, even, pale green, very solid, late.
- Stone Blenheim**, see Hambledon Deux Ans.
- Stone Pippin**, see Gogar.
- * **Stone's Apple**, see Loddington Seedling.
- Stone's Seedling**, see Loddington Seedling.
- * **Stoup Leadington** (Brunton), C. Large, oblong, angular, frequently with fleshy knob one side of the stalk, deep green, flushed, acid, mid-season; resembles Catshead.
- Stradbroke Pippin**, see Bess Pool.
- † **Strange's Seedling** (Ross), Large, round, green, somewhat resembles Stirling Castle.
- Strawberry Beauty**.
- Strawberry Bitter-sweet** (Ritchie), Cider. Small, conical, angular, pale green, flushed.
- Strawberry Norman**, Cider. Medium, conical, green, streaked red.

- * **Strawberry Pippin** (Slater), D. or C. Medium, flat, very pale, streaked, mid-season; second quality.
- Strawberry or Red Streak** (Mundell), D. Medium, round, red, streaked, firm, juicy, sweet, early; second quality.
- Stringer's Red** (Ritchie), Cider. Small, round, dark red, flesh tinged red, mid-season.
- * **Striped Beefing** (R.H.S.), C. Large, flat, open eye, green, streaked red, late; first quality; very handsome; a prolific bearer.
- Striped Calville** (Saunders), C. or Cider. Large, flat, angular, red, streaked, sweet, mid-season.
- Striped Coalhouse** (King), Cider. Small, ovate, yellow, streaked.
- Striped Monster Reinette** (Paul & Son), see Round Winter Nonesuch.
- Striped Pitcher** (Griffin), Cider. Small, round, even, red streaked.
- Striped Ribston** (Clayton), D. or C. Medium, ovate, angular, yellow, streaked, mid-season; first quality.
- Stubton Nonpareil** (Lee & Son), D. Small, conical, greenish russet, brisk, late; first quality.
- Sturmer Pippin** (R.H.S.), D. Small, flat, green, russet bronzed, firm, sweet, late; first quality; a free cropper.
- Styre's Bitter-sweet**, Cider. Small, oblong, pale flushed bronze.
- Sudbury Beauty** (R.H.S.), D. Small, round, yellow, russet, firm, sweet, mid-season; first quality.
- Sugar and Cream** (Gee), Small, ovate, light russet.
- Sugar and Cream** (Hiam), Cider. Small, conical, red, streaked.
- Sugar Apple** (Cranston Nursery Company).
- Sugar Pippin** (Wheeler & Son), D. Small, round, yellow, sweet, mid-season; third quality.
- * **Sugarloaf Pippin** (R.H.S.), C. Medium, oblong, angular, pale yellow, tender, sweet, first early; first quality; a great cropper.
- Summer Golden Pippin**, see Yellow Ingestrie.
- * **Summer Golden Pippin** (R.H.S.), D. Small, conical, greenish yellow, flushed, tender, sweet, first early; first quality.
- Summer Nonesuch**, see Nonesuch.
- * **Summer Nonpareil** (R.H.S.), D. Small, round, pale yellow, brisk acid, early; second quality.
- Summer Orange** (Saltmarsh), D. Medium, flat, orange yellow, flushed, sweet, early; third quality.
- Summer Pearmain** (J. Scott), D. or C. Small, conical, angular, streaked, yellow, acid, mid-season.
- Summer Pearmain**, see Claygate Pearmain.
- Summer Queen** (Cheal), D. Small, round, yellow, streaked, early; second quality.

Summer Queen (Pragnell), D. Large, flat, angular, streaked yellow, very sweet; third quality.

Summer Quoining (Ritchie), C. Medium, conical, angular, light bronze red, early.

Summer Rose (McIndoe).

Summer Strawberry (Paul & Son), D. or C. Large, round, angular, red streaked, firm, mid-season; handsome.

Summer Strawberry (Whyte), D. Small, ovate, red streaked, sweet, first early.

Summer Strawberry (Lee & Son), D. Medium, conical, angular, red streaked, soft, early; a pretty, early Apple.

Summer Sweet (Crossland), D. Small, round, yellow, early; third quality.

Summer Thorle (Mundell), D. Small, flat, very clear, red flushed and streaked, flesh white, sweet, first early; first quality; a great cropper; much grown in Scotland.

Summer Whorle, see **Summer Thorle**.

Sunflower, see **Yorkshire Beauty**.

Surpasse Reinette d'Angleterre, see **Reinette de Canada**.

Surrey Nonpareil, see **Sweeney Nonpareil**.

Sutton Beauty (Rivers), D. Medium, round, streaked orange, sweet, mid-season; first quality; resembles Cox's Orange Pippin.

Swaar (McIndoe), D. Small, round, yellow, very hard, mid-season; third quality.

Swaar (R.H.S.), resembles **Rhode Island Greening**.

Swedish Pearmain, see **Swedish Reinette**.

* **Swedish Reinette** (R.H.S.), D. or C. Large, conical, even, small eye, bright rosy red, streaked, acid, soft, mid-season; second quality; an extremely pretty Apple.

Sweet Achan (J. Scott), C. Medium, round, streaked yellow, sweet; worthless.

Sweet Albert, C. or Cider. Medium, conical, angular, pale green flushed, sweet.

Sweet Alfred (R. Veitch & Son), Cider. Small, round, flushed yellow, sweet.

Sweet Buckland (Garland), C. Medium, flat, bronze green, very dry; worthless.

Sweet Haccombe, Cider. Small, conical, angular, yellow, streaked.

Sweet Hangdown, Cider. Small, conical, yellow, flushed.

Sweet Kingston, Cider. Small, flat, angular, dark red, streaked.

Sweet Laden, see **Brabant Bellefleur**.

Sweet Lading, see **Brabant Bellefleur**.

Sweet Leydon, see **Brabant Bellefleur**.

Sweet Pennard, Cider. Small, round, yellow, flushed bronze.

Sweet Pomeroy, see **Old Pomeroy**.

- Sweet Portugal, Cider.** Small, conical, yellow, flushed.
- * **Sweet Reinette, D.** Small, flat, golden russet, sweet, late ; resembles Pitmaston Russet Nonpareil.
- Sweet Russet Coats (Poynter), D.** Medium, flat, yellow, russet, flushed ; worthless.
- Sweet Sheep's Nose (J. Scott), C. or Cider.** Medium, conical, pointed, pale green, streaked, mawkish sweet ; worthless ; resembles Old Pomeroy.
- Sweeney Nonpareil (R.H.S.), D.** Medium, flat, green, russet, very acid, late.
- Sweesley Imperial (Paul & Son).**
- * **Syke House Russet (J. Veitch & Son), D.** Small, flat, orange yellow, flaked russet, firm, sweet, mid-season ; first quality ; a very pretty and distinct Apple.
- Tankard, see Royal Codlin.**
- Tartnell, see Cardinal.**
- Taylor's Apple (Ritchie).**
- Taylor's Seedling, see Clove Pippin.**
- Ten Shillings (Dunn), D.** Medium, round, angular, red streaked, acid, early ; third quality.
- Ten Shillings, see White Square.**
- Terwin's Goliath, see Catshead.**
- * **Tewkesbury Baron (Wheeler), C. or Cider.** Large, round, large open eye, greenish yellow, flushed and streaked bright crimson, acid, mid-season ; a very handsome Apple.
- The Butcher (Gilbert),** very closely resembles Andrew's Invincible.
- The Fairy, see Fairy.**
- The Maiden (McKinnon), C.** Medium, flat, green, russet, streaked, acid, late ; resembles Hambledon Deux Ans, but with large open eye.
- The March Queen (Gilbert), D.** Small, flat, rounded, green, russet, late, acid ; third quality.
- The Miller's Thumb (King), D. or C.** Small, ovate, green, flushed ; worthless.
- The Parcel Post (Gilbert), D.** Small, round, angular, streaked yellow, sweet, early ; third quality.
- The Post Office (Gilbert), C.** Medium, conical, yellow, flushed, acid, mid-season ; worthless.
- The Professor (Fairgrieve), C.** Small, round, ovate, greenish yellow, acid, mid-season ; second quality.
- * **The Queen (Saltmarsh), C.** Large, flat, even, greenish yellow, streaked, soft, acid ; first quality ; mid-season ; a large and very handsome Apple.
- The Old Trumpeter, see Trumpington.**
- * **The Sandringham (Penny), C.** Large, conical, light green, flushed, tender, acid, mid-season ; first quality.

- The Ten Commandments** (Badger), D. or Cider. Medium, round, dark red, flesh brisk acid, streaked with red ; mid-season.
- The Woodman** (Gilbert), C. Small, round, yellow, flushed, acid, mid-season.
- Thickwood**, Cider. Small, flat, red, streaked.
- Thomage Seedling** (J. Scott), D. Small, round, bronze green, late ; third quality.
- Thomason** (S. Ford), C. or D. Medium, conical, angular, red, flushed, soft, early.
- Thomason** (Cheal).
- Thompson's Seedling**, see New Northern Greening.
- Thoresby Seedling**, see Grange's Pearmain.
- Thorle**, see Summer Thorle.
- * **Thorle Pippin**, see Summer Thorle.
- Three Years Old**, see French Crab.
- * **Tibbett's Incomparable**, see Tibbett's Pearmain.
- * **Tibbett's Pearmain** (Killick), C. Very large, conical, angular, greenish bronze, streaked, flesh dry ; second quality, mid-season ; a handsome distinct Apple.
- Tiffen** (Crossland), C. Small, round, red, streaked, flesh white, mid-season.
- Tiltwood Pippin** (Gandy), C. Medium, ovate, large eye, pale green, flushed, acid, mid-season.
- Tobut's Red Streak** (S. Ford), C. or Cider. Large, round, angular, green, streaked, soft, acid.
- Toker's Incomparable** (Saunders), C. Large, round, angular, greenish yellow, flushed, dry flesh, mid-season ; somewhat like a pale Hollandbury.
- Tom Harryman** (Beaton), C. Medium, round, yellow, soft, early.
- Tom Montgomery** (Forbes), C. Medium, flat, angular, light copper, dry, mid-season.
- * **Tom Putt**, C. or Cider. Large, round, angular, dark red, streaked, firm, acid ; second quality, mid-season ; a very handsome Apple.
- Tom Tadpole** (Chuck), D. Small, round, yellow, acid, early ; third quality.
- Top Apple**, see Goff.
- * **Tower of Glamis** (R.H.S.), C. Large, conical, angular, pale green, flushed, firm, acid, mid-season ; first quality ; a handsome Apple and a great cropper.
- Tower's Glory** (R.H.S.), C. Medium, round, even, green, flushed, very firm, late.
- Transcendent Crab** (Cheal), Small, ovate, yellow, flushed ; a very ornamental fruit.
- * **Transparent** (King), Small, round, angular, pale green, flushed ; worthless.

- Transparent Codlin** (R.H.S.), C. Medium, conical, angular, greenish yellow, flushed, soft, early; resembles Old English Codlin.
- Transparent de Croncelles** (Paul & Son), D. or C. Large, round, yellow, soft, early; second quality, clear skin, pretty.
- Traveller's Pippin**, see Herefordshire Pearmain.
- Treadcroft's Seedling** (J. Veitch & Sons), Small, conical, even, yellow, flushed, acid, late; resembles Edmund Jupp.
- Tremlett's Bitter** (Garland), Cider. Medium, oblong, red.
- Trumpeter** (Lane), C. Medium, round, green, streaked, soft, acid, early; worthless.
- * **Trumpington** (Cranston Nursery Company), D. Small, flat, angular, large open eye, red, streaked, sweet, mid-season; third quality.
- Tudball Russet**, see Wareham Russet.
- Tun Apple** (Saltmarsh), D. Large, oblong, reddish russet, mid-season; first quality.
- Turbanks** (Bull).
- Turk's Head**, see Round Winter Nonesuch.
- * **Twenty Ounce** (R.H.S.), C. Medium, round, pale green, soft, mid-season.
- Twenty Shillings** (S. Ford), C. Small, conical, even, pale yellow, soft, mid-season; worthless.
- Twin Cluster Golden Pippin**, see Cluster Golden Pippin.
- Twining's Apple** (Haycock), D. Small, flat, green, russet, late; third quality.
- Twining's Pippin** (G. Bunyard & Co.), D. Small, round, even, green, russet, late.
- Two Years Old** (Ritchie), D. Small, flat, russet, flushed, dry; worthless.
- * **Tyler's Kernel** (Parker), C. Large, conical, greenish yellow, flushed, deep red, firm, acid, mid-season; first quality; a very handsome Apple.
- Uellner's Golden Reinette** (Cummins), D. Medium, flat, large open eye, clear yellow, flushed russet, dry, mid-season; first quality.
- * **Uncle Barney**, see Lucombe's Seedling.
- Underleaf** (Cranston Nursery Company), D. Small, conical, angular, light russet; worthless.
- Upright French**, Cider. Conical, angular, yellow, russet, flushed.
- Vale Mascall Pearmain** (R.H.S.), D. Small, round, flattened, red, russety, firm, brisk, acid, mid-season.
- Valleyfield**, Cider. Small, round, red streaked.
- Van Houtte**, see Evagil.
- Van Mons Reinette** (Rivers), D. Small, round, yellow, russet, mid-season; second quality.

Vaun's Pippin (Rivers).

Veitch's Cluster, see Warner's King.

Ventmus Ellicott Pippin, see King of the Pippins.

Vermilion d'Espagne, see Fearn's Pippin.

Victoria, see Holbert's Victoria.

Vineyard Pippin, see Hanwell Souring.

Vineyard Pippin (Lee & Son), Greatly resembles Fearn's Pippin.

- * **Wadhurst Pippin** (R.H.S.), D. or C. Large, round, yellow, streaked, firm, acid, mid-season ; first quality.

Wagener (Rivers), D. Medium, round, green, streaked, mid-season ; second quality.

Wagner (R.H.S), D. Medium, flat, angular, greenish yellow, flushed, sweet, mid-season.

Walker's Summer Broading (Pearson), D. or C. Medium, flat, greenish yellow, streaked, mid-season ; a great cropper.

Walsgrove Blenheim, see Bess Pool.

Walsgrove Wonder, see Yorkshire Beauty.

Walter Blackett's Favourite, see Sir Walter Blackett's Favourite.

- * **Waltham Abbey Seedling** (R.H.S.), C. Large, round, pale yellow, soft, tender, mid-season ; first quality ; a great cropper.

- * **Waltham Cross** (W. Paul & Son), D. or C. Medium, flat, even, greenish yellow, red streaked, soft, sweet ; pretty.

Waltham Pippin (R.H.S.), D. Medium, round, angular, green, flushed red, soft, sweet, mid-season ; second quality.

Ward's Pippin, see Blenheim Orange.

Ward's Red (Wright).

- * **Wareham Russet** (Dickson), C. Large, flat, angular, green, russet, flushed bronze, firm, late ; a very fine Apple.

- * **Warner's King** (J. Veitch & Sons), C. Very large, round, flattened, pale green, soft, tender, early ; first quality.

Warner's Pippin (Ross), C. Large, oblong, pale green, flushed, mid-season.

- * **Warner's Seedling** (Warner), C. Large, flat, green, flushed red, firm, acid, late ; first quality ; resembles Bramley's Seedling.

- * **Warwickshire Pippin**, see Wyken Pippin.

- * **Washington** (G. Bunyard & Co.), D. or C. Large, round, yellow streaked, soft, mid-season ; first quality ; a very fine looking Apple.

Water Pippin (S. Ford), C. Small, conical, green, acid, mid-season ; worthless.

Water's Crab, Cider. Small, round, green.

Waterford Nonpareil (Saunders), D. Small, conical, green, russet, late ; third quality.

Waterloo, see Fearn's Pippin.

- Waterloo Pippin** (J. Scott), C. Small, round, flushed, yellow, late; third quality.
- Watson's Dumpling** (J. Veitch & Sons), D. or C. Medium, conical, angular, yellow, streaked, sweet, mid-season.
- † **Watson's Nonesuch**, see Thorle Pippin.
- Wax Apple** (S. Ford), Small, conical, golden; an ornamental Crab.
- Waxwork** (Bates).
- † **Wealthy** (Bunyard), D. Medium, round, flushed red, flesh white, tender; first quality; mid-season, pretty.
- Weaver's Kernel**, Cider. Small, round, red streaked.
- Webb's Russet** (Cummins), C. Large, flat, green, russet, acid, late.
- Webster's Harvest Festival** (Britcher), see Hoary Morning.
- Welford Park Nonesuch** (Ross), C. Large, round, flattened, even, greenish yellow, streaked, soft, acid, mid-season; first quality; a very handsome Apple.
- Well Apple** (Ritchie), Cider. Large, round, red streaked; resembles Tom Putt.
- Well's Sweet** (Rivers), D. Medium, conical, green flushed, sweet; worthless.
- * **Wellington**, see Dumelow's Seedling.
- Wellington Pippin**, see Dumelow's Seedling.
- Wellington** (Bradley).
- Werder's Golden Reinette** (R.H.S.), D. Small, round, even, large open eye, pale yellow, flushed, sweet, mid-season; first quality; a very pretty Apple; resembles Hoffner's Golden Reinette.
- Wesleyan** (White), resembles Grey Pippin.
- Western Seedling** (Jenkins), D. or C. Small, round, angular, yellow, streaked, firm, mid-season; worthless.
- Westland** (Beaton), D. Small, round, yellow, acid, early; third quality.
- Wheeler's Kernel**, see Hawthornden.
- Wheeler's Late Keeping** (Moorhouse), D. Small, conical, reddish russet, acid, mid-season; second quality.
- * **Wheeler's Russet** (Cranston Nursery Company), D. Medium, round, russet, firm, sweet, late; first quality.
- Whistleberry** (King).
- Whitby Pippin** (Ritchie).
- White Acid** (J. Scott), Small, conical, pale green, acid, mid-season; worthless.
- White Apple** (Warden).
- White Astrachan** (Dunn), D. or C. Small, conical, angular, very pale yellow, soft, first early; second quality.
- White Bitter-sweet**, Cider. Small, round, pale yellow.
- White Blenheim** (Hiam), C. Medium, round, green, acid, mid-season.

- White Buckland**, see Devonshire Buckland.
- White Busbelly** (Garland), Cider. Small, conical, angular, yellow flushed.
- * **White Calville**, see Calville Blanche.
- White Calville**, see Scotch Bridget.
- White Cluster** (Garland), Cider. Small, flat, angular, very pale yellow.
- White Codlin** (Clark), C. Medium, ovate, angular, pale yellow, early.
- White Devonshire** (S. Ford), C. Large, conical, angular, greenish yellow, soft, mid-season ; worthless.
- White Dumpling**, resembles White Melrose.
- White Dutch Mignonne**, see Dutch Mignonne.
- White Hawthornden**, see Hawthornden.
- White Holland Pippin** (S. Ford), C. Medium, conical, pale green, flushed, firm, acid, late.
- White Itterly Bitter-sweet** (Ritchie), Cider. Small, round, pale yellow.
- White Jersey**.
- White Juneating** (Kidd), D. Small, round, flattened, greenish yellow, faintly flushed, very sweet, first early ; a nice and very early Apple.
- White Loaf** (Slater), C. Small, flat, angular, pale green, flushed red, dry, mid-season.
- White Melrose** (Hogg), C. Large, broad, conical, angular, pale yellow, soft, early ; a fine Apple.
- White Moloscha** (R.H.S.), see Wyken Pippin.
- White Moncrieff** (King), C. Medium, conical, angular, pale yellow, early.
- White Musk** (Cranston Nursery Company), Round, greenish yellow, soft, early.
- White Nonpareil** (R.H.S.), D. Small, flat, green, russet, flesh white, tender, sweet, mid-season ; first quality.
- White Norman**, Cider. Very small, round, pale.
- * **White Paradise**, see Egg.
- White Pippin**, see Devonshire Buckland.
- White Pippin** (Hathaway). Small, conical, angular, pale green ; worthless.
- † **White Quarrenden** (R. Veitch), Medium, round, pale, streaked red, soft ; worthless.
- White Russet** (Pearson), C. Large, oblong, angular, flushed orange russet, dry, mid-season ; worthless.
- White Russet** (Wood & Ingram), D. Medium, flat, angular, bronze flushed, sweet, late.
- White Square** (Crossland), C. Large, flat, angular, yellow, flushed, dry, early.
- White Tom Putt** (Pagnell), Cider. Small, round, pale yellow, very long stalk.

- White Winter Pearmain** (Rivers), see **Golden Winter Pearmain**.
- White's Newtown Pippin**, see **Newtown Pippin**.
- Whiting Pippin** (Ritchie), C. Medium, flat, angular, yellow, sweet, mid-season; second quality.
- Whittle's Dumpling** (Poynter), C. or Cider. Large, flat, angular, pale yellow, flushed bright red, very acid, mid-season; resembles **Hollandbury**.
- Whorle Pippin**, see **Summer Thorle**.
- Wilding's Bitter-sweet** (Haywood), Cider. Small, conical, yellow, flushed.
- Wilding's Kernel**, Cider. Small, round, yellow, streaked red.
- Wilding's Red Streak** (J. Scott), C. Small, conical, greenish yellow, streaked, acid, mid-season.
- William Richardson** (S. Ford).
- Willie Bonny** (King), C. Medium, round, angular, streaked yellow, acid, late.
- Wilson's Codlin**, see **Nelson Codlin**.
- Wilson's Prolific** (Pragnell), D. Small, round, angular, red, early, mawkish sweet; third quality.
- Wilson's Prolific** (Killick), D. Small, round, large open eye, red, acid, late; second quality.
- Wiltshire Pippin**, C. Medium, round, streaked yellow, sweet, mid-season.
- Windsor Castle** (Dickson), D. or C. Large, flat, red flushed, sweet, mid-season; second quality; a pretty Apple.
- Wine Sour**, Cider. Round, yellow, streaked.
- Winnett's Apple**, C. Medium, oblong, pale yellow, soft, early.
- Winter Ballyfatten**, see **Sir Walter Blackett's Favourite**.
- Winter Beefing**, see **Norfolk Beefing**.
- Winter Bellefleur**, see **Hambleton Deux Ans**.
- Winter Bellefont** (R. Veitch & Son), D. Small, round, green, streaked, hard, late; third quality.
- Winter Codlin** (R.H.S.), C. Large, round, angular, pale green, very firm, late.
- Winter Coleman**, see **Norfolk Beefing**.
- Winter Fullwood** (Brunton), C. Medium, conical, angular, green russet, flushed, very dry flesh, late.
- Winter Golden Pearmain**, see **Golden Winter Pearmain**.
- Winter Greening**, see **French Crab**.
- * **Winter Hawthornden** (R.H.S.), C. Large, flat, very pale yellow, almost white, firm, acid, mid-season; first quality, handsome; a great cropper; distinct from **New Hawthornden**.
- Winter Hillier**, see **Hambleton Deux Ans**.
- Winter Lawrence** (Poynter), D. Small, conical, even, yellow, brisk, mid-season; first quality; very handsome.

- Winter Majetin** (R.H.S.), D. Small, round, angular, green, bronze, firm; second quality, mid-season.
- Winter Nonesuch** (Pragnell), D or C. Medium, ovate, pale yellow, streaked, dry, early; pretty, but worthless.
- Winter Peach**, see Devonshire Buckland.
- * **Winter Peach**, D. or C. Medium, flat, open eye, pale green, flushed, firm, late; first quality; a very pretty Apple.
- * **Winter Pearmain**, see Old Winter Pearmain.
- Winter Pearmain**, see Dredge's Fame.
- Winter Pearmain**, see Claygate Pearmain.
- * **Winter Quoining** (J. Veitch & Sons), C. Small, oblong, very angular, especially near the crown, light russet, flushed, dry, mid-season.
- Winter Red Streak** (McKinnon), C. Medium, round, flattened, red streaked, late.
- Winter Red Streak** (Dunn), resembles Cambusnethan Pippin.
- Winter Ribston**, see Baddow Pippin.
- Winter Ruby** (Graham), C. Medium, flat, angular, bronze, streaked, acid, firm; somewhat resembles Yorkshire Greening.
- Winter Russet** (S. Ford), C. Medium, conical, green, russet, late; third quality.
- * **Winter Strawberry** (Brunton), C. Medium, conical, angular, pale green, streaked, acid, mid-season.
- Winter Streak** (Graham), C. Medium, conical, angular, green, red streaked, hard, late.
- Winter Striped Pearmain** (Gilbert), D. or C. Medium, conical, greenish yellow, russet streaked, acid, mid-season; third quality; greatly resembles Adams' Pearmain.
- Winter Stubbard** (Rogers), Small, conical, pale yellow, flushed, acid; worthless.
- Winter Wynd** (Morrison), C. Medium, round, angular, green streaked, firm, acid, late.
- * **Wippell's Seedling** (R. Veitch & Son), D. or C. Medium, conical, even, greenish yellow, streaked, mid-season, acid; second quality; a handsome Apple, not unlike Cellini.
- * **Withington Fillbasket** (R.H.S.), C. Very large, round, angular, greenish yellow, flushed, soft, mid-season.
- Witney's Kernel** (Ritchie).
- Woodbine Pippin** (Pearson), D. Medium, round, green, streaked, acid, late, third quality.
- Woodhill** (Rivers), D. Medium, conical, angular, streaked yellow, sweet, mid-season; second quality.
- * **Woodley's Favourite** (Wood & Ingram), C. Large, round, angular, greenish yellow, mid-season.
- Woolaston Pippin** (Cranston Nursery Company), C. Small, conical, pale yellow, acid; pretty, but worthless.

Woolaton Pippin, see Court Pendu Plat.

Woolaton Pippin, resembles Dutch Mignonne.

Wooling's Favourite, see Beauty of Kent.

Worcester Fillbasket.

- * **Worcester Pearmain** (R. Smith & Co.), D. small, round, red, early; first quality; a very pretty Apple, and a free bearer; resembles Duchess's Favourite.

Wormsley Grange (Cranston Nursery Company), C. Large, round, angular, greenish yellow; first quality, mid-season.

- * **Wormsley Pippin** (J. Veitch & Sons), D. or C. Large, round, angular, greenish yellow, brisk, sweet, early; first quality; a very free bearer.

- * **Wyken Pippin** (R.H.S.), D. Small, flat, even, pale green, mid-season; first quality; a pretty Apple.

Yellow Beefing (R.H.S.), C. Medium, flat, angular, green, acid, mawkish; worthless.

Yellow Bellefleur, see Mrs. Barron.

Yellow Bough (R.H.S.), D. or C. Large, conical, even, pale yellow, flushed, soft, sweet, early; first quality; a very pretty Apple.

Yellow Coalbrook (Rogers), Cider. Medium, round, angular, orange, flushed.

- * **Yellow Ingestrie**, Small, conical or oblong, even, bright golden yellow, sweet, early; first quality; a pretty Apple and a great cropper.

Yellow Newtown Pippin (Lee & Son), D. Medium, flat, angular, bronze green, late; third quality.

Yellow Norman (Cranston Nursery Company), Cider. Medium, conical, angular, flushed yellow.

Yellow Strawberry (Ritchie), C. or Cider. Medium, round, yellow streaked, acid, mid-season; third quality.

Yellow Styre, Cider. Ovate, greenish yellow.

York Glory (R.H.S.), C. Large, round, flattened, red streaked, late; somewhat resembles Hoary Morning.

- * **Yorkshire Beauty** (R.H.S.), C. Large, round, angular, orange yellow, flushed bright red; second quality, mid-season; a very heavy cropper.

Yorkshire Beefing, see Winter Majetin.

Yorkshire Cockpit, see Cockpit.

Yorkshire Goose Sauce, see Yorkshire Greening.

- * **Yorkshire Greening** (R.H.S.), C. Large, flat, angular, green, streaked red, acid, late; first quality; a very fine sauce Apple.

Yorkshire Pippin, C., see Round Winter Nonesuch.

Yorkshire Queen, C., see Hambleton Deux Ans.

SYNONYMS.

(AS NOTED AT THE CONGRESS.)

- | | |
|---|---|
| <p><i>Adams' Pearmain.</i>
 Adams' Reinette.
 Rough Pippin.
 Winter Striped Pearmain.</p> <p><i>Alexandra.</i>
 American Catkin.</p> <p><i>Allen's Everlasting.</i>
 Harvey's Everlasting.</p> <p><i>Api.</i>
 Lady Apple.</p> <p><i>Atkin's Seedling.</i>
 Atkin's No. 2.</p> <p><i>Autumn Calville.</i>
 New Blandon.</p> <p><i>Autumn Pearmain.</i>
 Ronald's Royal Winter.</p> <p><i>Baddow Pippin.</i>
 D'Arcy Spice.
 Spring Ribston.
 Winter Ribston.</p> <p><i>Barcelona Pearmain.</i>
 Black Norman.</p> <p><i>Baumann's Red Winter Reinette.</i>
 Gros Pigeonet.
 Reinette Baumann.</p> <p><i>Baxter's Pearmain.</i>
 King of the Orchard.</p> <p><i>Beauty of Kent.</i>
 Gadd's Seedling.
 Kentish Beauty.
 Kentish Broading.
 Woolling's Favourite.</p> <p><i>Benoni.</i>
 Fail me Never.</p> | <p><i>Bess Pool.</i>
 Old Bess Pool.
 Stadway Pippin.
 Stradbroke Pippin.
 Black Blenheim.
 Muskirke Gelbe Reinette.
 Walsgrove Blenheim.</p> <p><i>Blenheim Orange.</i>
 Beauty of Hants.
 Blenheim Pippin.
 Dredge's Fame.
 Gloucester Pippin.
 Northampton.
 Postrophe.
 Prince of Wales.
 Ward's Pippin.</p> <p><i>Brabant Bellefleur.</i>
 Bellefleur Brabant.
 Iron Apple.
 New Scarlet Pearmain.
 Sweet Laden.
 Sweet Lading.
 Sweet Leyden.
 Winter Bellefleur.</p> <p><i>Braddick's Nonpareil.</i>
 Lincolnshire Reinette.</p> <p><i>Brietling.</i>
 Menagère.</p> <p><i>Bringewood Pippin.</i>
 Pompone Pippin.</p> <p><i>Burchardt's Reinette.</i>
 Burchardt's Seedling.</p> <p><i>Byson. Wood Russet.</i>
 Bisingwood Russet.</p> <p><i>Calville Blanche.</i>
 White Calville.</p> |
|---|---|

Calville Rouge d'Automne.
 Red Autumn Calville.
 Red Blandon.

Cambusnethan Pippin.
 Winter Red Streak.

Cardinal.
 Tartnell's.

Carlisle Codlin.
 Irish Codlin.
 Musk Apple.

Catshead.
 Green Leadington.
 Leadington Monstrous.
 Loggerhead.
 Monstrous Leadington.
 Stock Leadington.
 Terwin's Goliath.

Cellini.
 Phillip's Seedling.
 Selling Pippin.

Claygate Pearmain.
 Archerfield Pearmain.
 Bradley's Pearmain.
 Brown's Pippin.
 Empress Eugénie.
 Deepdene Pearmain.
 Doncaster Pearmain.
 Formosa Nonpareil.
 Formosa Pippin.
 Fowler's Pippin.
 Mason's.
 Ribston Pearmain.
 Summer Pearmain.
 Winter Pearmain.

Clove Pippin.
 Taylor's Seedling.

Cluster Golden Pippin.
 Cluster Pippin.
 Golden Cluster Pippin.
 Twin Cluster Golden Pippin.

Cockle's Pippin.
 Brown Cockle Pippin.
 Nutmeg Pippin.

Cockpit.
 Yorkshire Cockpit.

Coe's Golden Drop.
 Golden Drop.
 Bishop's Thumb.

Colonel Vaughan.
 Kentish Pippin.
 Red Coachman.
 Scarlet Incomparable.

Cornish Aromatic.
 Aromatic.

Court Pendu Plat.
 Woolaton Pippin.

Court of Wick.
 Glass of Wine.
 Rendell's Pippin.

Cox's Orange Pippin.
 Kemp's Orange.

Cox's Pomona.
 Fearn's Apple.
 Hill's Seedling.
 Pomona.
 Red Ingestrie.

Cox's Redleaf Russet.
 Redleaf Russet.

Devonshire Buckland.
 Golden Ball.
 Lord Wolseley.
 Pile's Victoria.
 White Buckland.
 White Pippin.
 Winter Peach.

Devonshire Quarrenden.
 Quarrenden.
 Red Quarrenden.

Downton.
 Majestic.
 Reinette Carmelite.

Downton Nonpareil.
 Clarke's Pippin.

Drap d'Or.
 Eldon Pippin.

Dredge's Fame.
 Winter Pearmain.

Duchess's Favourite.
 Duchess of York.
 Duchess of York's Favourite.
 Duchess of Glo'ster.

Duchess of Oldenburg.

Borovitsky.

Early Joe.

Queen Mary.

Duke of Devonshire.

Holker.

Dumelow's Seedling.

Duke of Wellington.

Fair Maid of Taunton.

Lord Duncan.

Lord Hampton's Wonder.

Normanton Wonder.

Souring Apple.

Wellington.

Wellington Pippin.

Dutch Fullwood.

Fullwood.

Dutch Mignonne.

Croft Angry.

Contor.

Copmanthorpe Russet.

Grosser Casselar Reinette.

Rawle's Reinette.

Reinette de Caux.

Reinette Impératrice.

White Dutch Mignonne.

Early Julien.

Julien.

Early June.

Early Margaret.

Margaret.

East Lothian Pippin.

East Lothian Seedling.

Eccleston Pippin.

Gay's Harvest Reinette.

Ecklinville Seedling.

Ecklinville Pippin.

Ecklinville.

Glory of the West.

Edmund Jupp.

Holtzen's Herbst Apfel.

Egg or White Paradise.

Adam's Apple.

Egg Apple.

Lady's Finger.

Paradise.

White Paradise.

Emperor Alexander.

Alexander.

Grand Alexander.

Jolly Gentleman.

Russian Emperor.

Evagil.

Evagil Pippin.

Van Houtte.

Fairy.

Fairy Apple.

Queen Apple.

Fearn's Pippin.

Bennet's Defiance.

Smiling Mary.

Vermilion d'Espagne.

Waterloo.

French Crab.

Amiens Long Keeper.

Easter Pippin.

Green Beefing.

Iron King.

Winter Greening.

Galloway Pippin.

Gallibro.

Galloway's Apple.

Galway's.

Garret's Golden Pippin.

Garret's Pippin.

Gloria Mundi.

Baltimore.

Belle Dubois.

Monstrous Pippin.

Spanish Pippin.

Glory of England.

Gascoigne's Seedling.

Goff.

Ackland Vale.

Kentish Orange Goff.

Orange Goff.

Top Apple.

Gogar or Stone.

Gogar Pippin.

Stone Pippin.

- Gold Russet.*
 Old Golden Russet.
- Golden Ducat.*
 Cobham.
 Ducket.
- Golden Harvey.*
 Brandy Apple.
 Bradley's Golden Pearmain.
 Guernsey Pippin.
- Golden Knob.*
 Kentish Golden Knob.
- Golden Noble.*
 Glow of the West.
 Golden Stranger.
 Gough's Seedling.
 Lord Clyde.
 Rutlandshire Foundling.
- Golden Pippin.*
 Milford Pippin.
- Golden Reinette.*
 Old Golden Reinette.
 Russet Pine Apple.
- Golden Winter Pearmain.*
 Golden Pearmain.
 Reinette Perle.
 White Winter Pearmain.
 Winter Gold Pearmain.
- Grand Duke Constantine.*
 Grand Duke.
- Grange Pippin.*
 Beauty of Wells.
- Grange's Pearmain.*
 Coronation Pippin.
 Thoresby Seedling.
- Gravenstein.*
 Tom Harryman.
- Hambleton Deux Ans.*
 Blue Stone Pippin.
 Deux Ans.
 Hambleton.
 Green Blenheim.
 Green Kitchen.
 Hamilton's.
 Mitchell's Seedling.
 Pine Apple Pippin.
- Pile's Russet.
 Pudding Apple.
 Smiling Beauty.
 Somersetshire Deux Ans.
 Stone Blenheim.
 Winter Hillier.
 Yorkshire Queen.
- Hammond's Jersey Pippin.*
 Jersey Pippin.
 Saunders' Jersey Pippin.
- Hammond's Pippin.*
 Hammond's Pearmain.
- Hanwell Souring.*
 Landmere Russet.
 Lawrence's Seedling.
 Red Shannon.
 Vineyard Pippin.
- Hawthornden.*
 Hawley.
 Hawthornden Red.
 Lincolnshire Pippin.
 Lord Kingston.
 Shoreditch Whites.
 Wheeler's Kernel.
 White Hawthornden.
- Herefordshire Pearmain.*
 Traveller's Pippin.
- Hicks' Fancy.*
 Early Nonpareil.
 Lord Exeter's Favourite.
 Nonpareil Early.
- Hoary Morning.*
 Honeymoon.
 Webster's Harvest Festival.
- Holbert's Victoria.*
 Hulbert's Victoria.
 Victoria.
- Hollandbury.*
 Bon Rouge.
 Bland's Summer.
 Livesey's Imperial.
 Scarlet Admirable.
- Hunt's Royal Red.*
 Rother Eisen.
- Imperial.*
 Belle Imperiale.

Irish Giant.

Mead's Brooding.

Irish Peach.

Early Apple.

Jersey Chisel.

Chisel Jersey.

John Apple.

Northern Greening.

Keens' Seedling.

Kiston.

Kentish Fillbasket.

Fillbasket.

Keswick Codlin.

Everbearing.

King Pippin.

Donabety.

Odelson's.

Red Streak Pippin.

King of the Pippins.

English Winter Gold Pear-
main.

Prince's Pippin.

Pike's Pearmain.

Seek no Farther.

Ventmuss Ellicott.

Lady Apple.

Pomme d'Api.

Lane's Prince Albert.

Prince Albert.

Lemon Pippin.

Reinette de Versailles.

Lewis's Incomparable.

Incomparable.

Loddington Seedling.

Lord Raglan.

Stone's.

Stone's Seedling.

London Pippin.

Calville du Haire.

Five Crown.

Five Crowned Pippin.

Old London Pippin.

Lord Suffield.

Lady Sutherland.

Livesley's Imperial.

Lucombe's Pine.

Lucombe's Pine Apple.

Lucombe's Seedling.

Uncle Barney.

Mabbott's Pearmain.

Canterbury.

McLellan.

Maclellan.

Manchester Pippin.

Muckleham Pearmain.

Manks' Codlin.

Belmont.

English Pitcher.

Eve.

Orme.

Margil.

Monymusk.

Mère de Ménage.

Red German.

Minchal Crab.

Minchall Crab.

Monovisten Reinette.

Brown's Imperial Russet.

Morgan Sweet.

Morgan.

Murfitt's Seedling.

Murfitt's Apple.

Nelson Codlin.

Wilson's Codlin.

New Hawthornden.

Hawthornden New.

Graham's Giant.

New Northern Greening.

Thompson's Seedling.

Newtown Pippin.

White Newtown Pippin.

Nine Square Pippin.

Nine Square.

Devon Nine Square.

Nonesuch.

- Early Nonesuch.
- Maiden.
- Nonesuch, Early.
- Old Nonesuch.
- Summer Nonesuch.

Norfolk Beefing.

- Norfolk Bearer.
- Norfolk Coleman.
- Ramsden.
- Red Beefing.
- Winter Coleman.
- Winter Beefing.

Norfolk Paradise.

- Cherry Orchard.

Norfolk Storing.

- Dolphine.
- Golden Ball.

Old English Codlin.

- English Codlin.

Old Golden Pippin.

- Golden Pippin.

Old Leathercoat Russet.

- Leathercoat Brown Russet.

Old Nonpareil.

- Golden Russet Nonpareil.
- Nonpareil.

Old Pomeroy.

- Jenny Oubury.
- Pomeroy of Somerset.
- Pomeroy.
- Sweet Pomeroy.

Old Winter Pearmain.

- Winter Pearmain.

Ornament de la Table.

- Pomme de Lippé.

Oslin.

- Arbroath Pippin.
- Arbroath Oslin.

Petworth Nonpareil.

- Green Nonpareil.
- Nonpareil Petworth.

Pile's Russet.

- Jews' Hands.

Pitmaston Russet Nonpareil.

- Pitmaston Russet.
- Russet Nonpareil.
- Nonpareil Russet.

Pine Apple Russet.

- Benwell's Large.
- Muss Russet.
- Pomeroy Russet.
- Russet Pine.

Pine, Golden Pippin.

- Pine Apple Russet.

Pitmaston Golden Pippin.

- Golden Pitmaston.

Pitmaston Pine Apple.

- Reinette d'Ananas.

Pomme de Neige.

- Fameuse.
- Formosa.
- La Fameuse.
- Red American.

Potts' Seedling.

- Dean's Codlin.
- Holland Pippin.
- Notts Seedling.
- Pratt's Pudding.

Queen Caroline.

- Bossom.
- Brown's Codlin.
- Spencer's Favourite.
- Spencer's Seedling.

Red Astrachan.

- Castle Leno Pippin.
- Duke of Devon.
- Pomeroy.

Red Winter Pearmain.

- Chilston Long Keeper.

Reinette de Canada.

- Reinette grise d'Automne.
- Reinette grise de Canada.
- Surpasse Reinette d'Angleterre.

Reinette de Hollande.

- Pomme Russet.

Ribston Pippin.
 Essex Pippin.
 Formosa.
 Nonpareil d'Angleterre.

Ringer.
 Balgonie.
 Doctor.

Ross Nonpareil.
 Nonpareil Ross.
 Lawson Pearmain.

Round Winter Nonesuch.
 Beauty of Wilts.
 Round Winter Codlin.
 Turk's Head.
 Striped Monster Reinette.
 Yorkshire Pippin.

Roundway's Magnum Bonum.
 Magnum Bonum.

Royal Codlin.
 Dutch Codlin.
 Fat Ox.
 Tankard.

Royal Russet.
 French Royal Russet.
 Large Russet.
 Pomme Royale.

Royal Somerset.
 Somerset.
 Somerset Lasting.

Rymer.
 Allman's Scarlet Pippin.
 Caldwell.
 Green Balsam.
 Lanterne.
 Old Caldwell.
 Parsons.

Sack.
 Herefordshire Sack.

Sam Young.
 Irish Russet.

Scarlet Crofton.
 Crofton Scarlet.

Scarlet Nonpareil.
 Nonpareil Scarlet.

Scarlet Pearmain.
 French Pippin.
 Melville Pippin.

Scorpion.
 D'Eclat.
 Harvey's Wiltshire Defiance.
 Russian Transparent.

Scotch Bridget.
 White Calville.

Sir W. Blackett's Favourite.
 Winter Ballyfatten.

Small's Admirable.
 Admirable.
 Lamb's Favourite.
 Silver Pippin.
 Small's Imperial.

Smart's Prince Arthur.
 Lady's Finger.
 Smart's Prince Albert.

Stirling Castle.
 King Noble.

Stoup Leadington.
 Leadington Stoup.

Sturmer Pippin.
 Apple Royal.
 Creech Pearmain.
 Moxhay.

Summer Strawberry.
 Brown's Codlin.

Summer Thorle.
 Lady Derby.
 Thorle.
 Thorle Pippin.
 Summer Whorle.
 Watson's Nonesuch.
 Whorle Pippin.

Swedish Reinette.
 Swedish Pearmain.

Sweeney Nonpareil.
 Nonpareil Sweeney.
 Surrey Nonpareil.

Sweet Sheep's Nose.
 Bell Apple.

Syke House Russet.

Culver Russet.

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Tibbet's Incomparable.

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Tom Putt.

Devonshire Nine Square.

January Tom Putt.

Tower of Glamis.

Dunster Codlin.

Seale's Winter Pippin.

Transparent.

Greening or Transparent.

Trumpington.

Eve Apple.

The Old Trumpeter.

Wadhurst Pippin.

Forman's Crew.

Lincoln Holland Pippin.

Ney-Mi.

Waltham Abbey Seedling.

Golden Noble.

Dr. Harvey.

Bardfield Defiance.

Emberson's Apple.

Wareham Russet.

Greenwood Russet.

Tudball Russet.

Warner's King.

Barker's Seedling.

Cobbet's Fall.

Cobbet's Fall Pippin.

David T. Fish.

Drumlanrig Castle.

King's.

Minier's Dumpling.

Nelson's Glory.

Poor Man's Friend.

Silverton Pippin.

Veitch's Cluster.

Wheeler's Russet.

Acklam Russet.

White Juneating.

Juneating.

White Melrose.

Melrose.

White Nonpareil.

Nonpareil, White.

Whittle's Dumpling.

Round Apple.

Winter Fullwood.

Cadbury.

Winter Hawthornden.

Hawthornden, Winter.

Winter Majetin.

Majetin.

Yorkshire Beefing.

Winter Peach.

Peach Bloom.

Winter Pearmain.

Grange's Pearmain.

Reinette très tardive.

Somerset Apple Royal.

Wyken Pippin.

Alford Prize.

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Pheasant's Eye.

White Moloscha.

Warwickshire Pippin.

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Yellow Ingestrie.

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Ingestrie.

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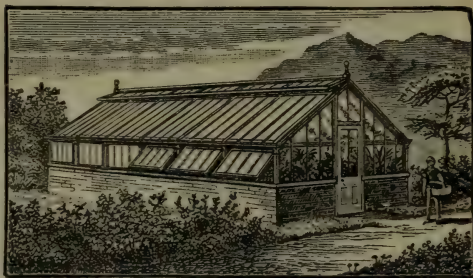
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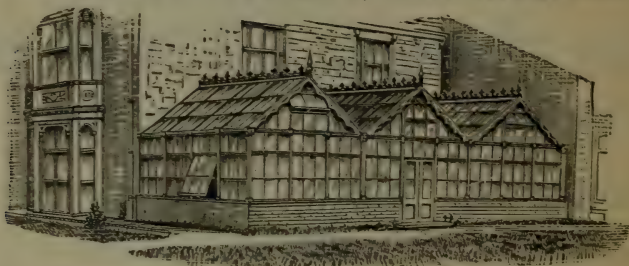
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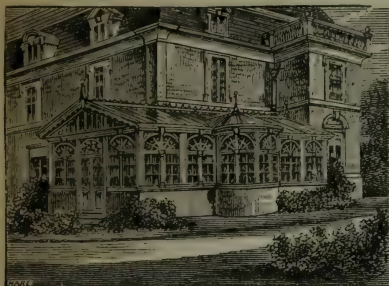
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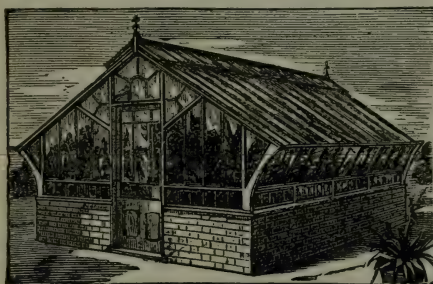
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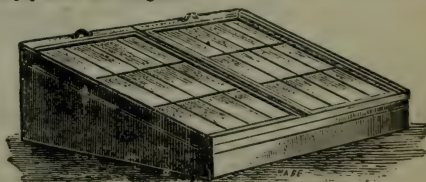
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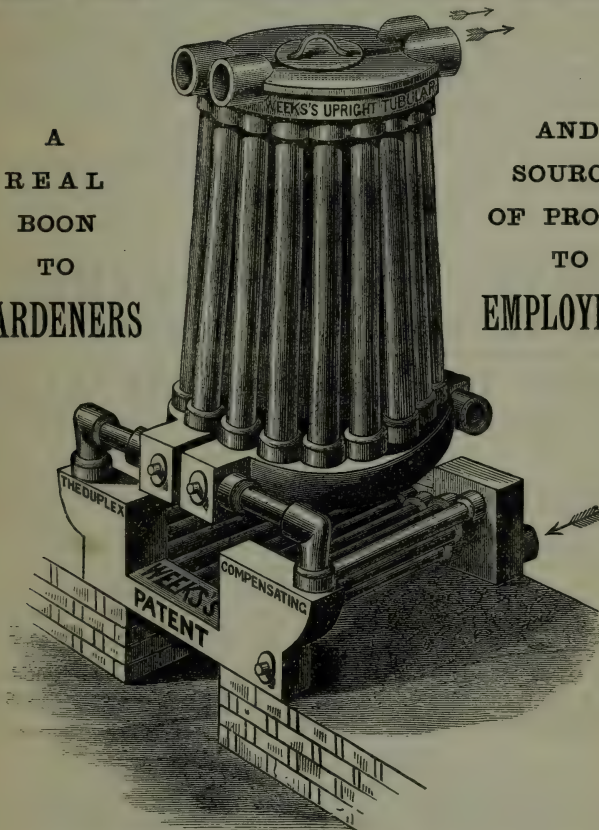
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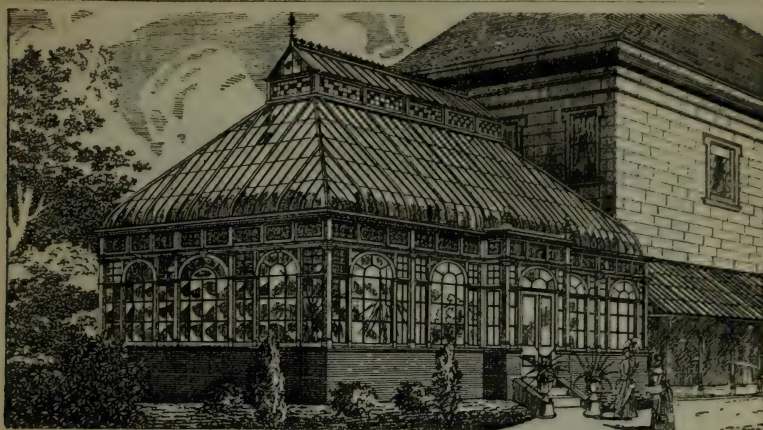
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